

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: _____ Examiner #: _____ Date: _____
 Art Unit: _____ Phone Number 30 _____ Serial Number: _____
 Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher <u>D. Schreiber</u>	NA Sequence (#) <u>4</u>	STN _____
Searcher Phone # <u>272-2526</u>	AA Sequence (#) _____	Dialog _____
Searcher Location <u>Rensselaer E01A66</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>4/2</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>14</u>	Fulltext _____	Sequence Systems <u>CompuGen</u>
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>8</u>	Other _____	Other (specify) _____

118552

Schreiber, David

From: Ramirez, Delia
Sent: Monday, March 29, 2004 5:54 PM
To: Schreiber, David
Subject: case 09/624670

Hi,

I would like to request the following interference search:

1. seq id 5 and 6 in the nucleic acid databases
2. seq id 63 and 64 in the nucleic acid databases

Thank you,

Delia M. Ramirez, Ph.D.
Patent Examiner
Recombinant Enzymes-Art Unit 1652
USPTO
400 Dulany Street, Remsen Bldg., 3A74, Mail room 3C70
Alexandria, VA 22314
(571) 272-0938
delia.ramirez@uspto.gov

04

55 09

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on: April 1, 2004, 08:28:07 ; Search time 78.9239 Seconds
(without alignments)
2102.410 Million cell updates/sec

Title: US-09-624-670-64

Perfect score: 1651
Sequence: 1 MEHFDASLSTFYKAFILGRPD.....HNSPESLNSYKPKRKQKD 299

Scoring table:

BLOSUM62
Xgapop 10.0, Xgapext 0.5
Ygapop 10.0, Ygapext 0.5
Fgapop 6.0, Fgapext 7.0
Delop 6.0, Delext 7.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Command line parameters:

-MODL=frame_plus_p2n.model -DEV=tblh
-Q=/cgn2_1/USPTO.epool/US09624670/rnatc 30032004 071120 14114/app query.fasta.1.910
-DB=Issued_Patents_NA -QEMT=fastlap -SUFFIX=rni -MINMATCH=0.1 -LOOPEL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blomsu62 -TRANS=human40.cdi
-LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE=LOCAL -OUTPMT=pct -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USBS=US09624670 @CGN 1 1 76 @rnatc 30032004 071120 14114 -NCPU=6 -ICPU=3
-NO MMAP -LARGESOURCY -NEG_SCORES=0 -WAIT -DSBLOCK=100 -LONGLOG
-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Issued Patents NA:
1: /cgn2_6/ptodata/2/ina/5A.COMB.seg:*
2: /cgn2_6/ptodata/2/ina/5B.COMB.seg:*
3: /cgn2_6/ptodata/2/ina/6A.COMB.seg:*
4: /cgn2_6/ptodata/2/ina/6B.COMB.seg:*
5: /cgn2_6/ptodata/2/ina/PCTUS.COMB.seg:*
6: /cgn2_6/ptodata/2/ina/backfile1.seg:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1651	100.0	900	4	US-09-903-456-6
2	1558	94.4	914	4	US-09-769-863-21
3	1558	94.4	914	4	US-09-903-456-3
4	956.5	57.9	879	4	US-09-903-456-5
5	476.5	28.9	1482	4	US-09-149-476-258
6	476.5	28.9	1542	4	US-09-149-476-106
7	466.5	28.3	1812	4	US-09-023-655-430
8	395.5	24.0	819	4	US-09-903-456-7
9	395.5	24.0	819	4	US-09-903-456-72
10	391.5	23.7	819	4	US-09-903-456-73
11	391	23.7	377	4	US-09-621-976-12605
12	390.5	23.7	819	4	US-09-903-456-70

13	388.5	23.5	818	4	US-09-903-456-71
14	386.5	23.4	819	4	US-09-903-456-69
15	385.5	23.3	819	4	US-09-903-456-74
16	381.5	23.1	957	4	US-09-769-863-22
17	381.5	23.1	957	4	US-09-903-456-2
18	326.5	19.8	1854	4	US-08-249-420-1
19	326.5	19.8	1854	4	US-08-737-663-1
20	294	17.8	630	4	US-09-903-456-67
21	255	15.4	580	4	US-09-145-828A-10
22	255	15.4	590	4	US-09-903-456-17
23	249	15.1	954	4	US-09-145-828A-1
24	249	15.1	954	4	US-09-903-456-1
25	246.5	14.9	867	4	US-09-903-456-4
26	219	13.3	989	1	US-07-885-970A-7
27	219	13.3	989	1	US-08-298-687A-7
28	219	13.3	989	1	US-08-530-797-6
29	219	13.3	989	1	US-08-298-828-7
30	219	13.3	989	1	US-08-787-335-6
31	217	13.1	798	4	US-09-903-456-63
32	209	12.7	587	4	US-09-145-828A-9
33	209	12.7	587	4	US-09-903-456-16
34	189	11.4	124	3	US-09-172-108-45
35	146	8.8	546	4	US-09-669-751-246
36	138.5	8.4	834	4	US-09-149-476-259
37	122	7.4	67	4	US-09-621-976-17477
38	110	6.7	3227	4	US-09-976-594-775
39	100.5	6.1	22846	2	US-08-469-461-3
40	100.5	6.1	22846	3	US-07-890-609-3
41	99.5	6.0	918	4	US-09-134-000C-751
42	99	6.0	4079	1	US-08-121-057-2
43	99	6.0	4079	2	US-08-509-187D-2
44	99	6.0	4079	2	US-09-121-396-2
45	99	6.0	4079	5	PCT-US93-09704A-2

ALIGNMENTS

RESULT 1
US-09-903-456-6
Sequence 6, 6677145
Patent No. 6677145
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407 US P3
CURRENT APPLICATION NUMBER: US/09/903,456
PRIOR FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 6
LENGTH: 900
TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-6
Alignment Scores:
Pred. No.: 6.8e-193
Score: 1651.00
Best Local Similarity: 100.00%
Query Match: 100.00%
Length: 900
Matches: 299
Conservative: 0
Mismatch: 0
Indels: 0
Gaps: 0

QY	Db
261 ArgArgLYLAspSptIseuLYsgLYstgInaBnGYSerValAlaAlaValAsnGLYHs 260	781 CGAAGAAAGACCACTGAAGACCCAGAAATGGCTCCGAGCTGCTGTGAATGACAC 840
281 ThrAsnSerPheProSerIreuGluuBnSerValLYSPrcArgLYsgInArgLYAsp 239	
841 ACCAAAGCTTTTCACCCCTGGAAACATGTGAAGCCAAAGAAAGCTGGCAAGAT 897	

RESULT 3

```

US-09-903-456-3
? Sequence 3, Application US/09903456
? Patent No. 6677145
? GENERAL INFORMATION:
? APPLICANT: Abbott Laboratories
? APPLICANT: Mukerji, Pradip
? APPLICANT: Leonard, Amanda Eun-Yeong
? APPLICANT: Huang, Yung-Sheng
? APPLICANT: Pereira, Suresha L.
? TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
? FILE REFERENCE: 6407, US, P3
? CURRENT APPLICATION NUMBER: US/09/903,456
? CURRENT FILING DATE: 2001-07-11
? PRIOR APPLICATION NUMBER: US 09/624,670
? PRIOR FILING DATE: 2000-07-24
? PRIOR APPLICATION NUMBER: US 09/379,095
? PRIOR FILING DATE: 1999-08-23
? PRIOR APPLICATION NUMBER: US 09/145,828
? PRIOR FILING DATE: 1998-09-02
? NUMBER OF SEQ ID NOS: 116
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ ID NO 3
? LENGTH: 914
? TYPE: DNA
? ORGANISM: Homo sapiens
US-09-903-456-3

```

Alignment Scores:

Pred. No.:	1.se-181
Score:	158.00
Percent Similarity:	97.32%
Best Local Similarity:	92.98%
Query Match:	94.37%
DB:	4
Gaps:	0

US-09-624-670-64 (1-299) X US-09-903-456-3 (1-914)

QY 1 MetGluH:PhAspIAserLeuSerThrYrPhelValAlaPheLeuGlyPProArgAsp 20
Db 1 ATGGACATTTTGAATGCATCTTAGTACCTATTCAAGGACATGGCCCTCGAGAT 60
QY 21 ThrArgValIleGlyYrPheLeuLeuAspAntYrIleProThrPheValCysSerVal 40
Db 61 ACTAGAGTAAAGAGATGGTTCTTCTTGACAAATTATACCCACATTTATCTGCTGTC 120
QY 41 ILeTyrLeuLeuIleValTrpLeuGlyProIleYrMetIleAsnArgIleProPheSer 60
Db 121 ATATATTTCCTATTGTATGTATGCTGGGACCAAAATTCATGAGAGATTAACAGCCATTCT 180
QY 61 CysArgGlyIleLeuGluIleuYrAsnLeuGlyLeuThrLeuLeuSerLeuYrMetPhe 80
Db 181 TGGCGGGGAGATTTTAGTGGTGTATACCTGGACACACATGCTGTCTGTATATGTTC 240
QY 81 TyrGluLeuValThrGlyValTrpGluGlyYrYrAsnPhePheCysGluGlyThrArg 100
Db 241 TGTGAATTGTATACAGGAGTATGGGAAGGCAAAATCAACTTCTCTGCAGGGGACACGC 300
QY 101 SerAlaGlyGluSerAspMetLysIleIleArgValLeuTrpTrpYrYrPheSerLys 120
Db 301 ACCGCGAGGAGATTCAGATATGAAGATTATCCGTGCTCTGGTGGTACTACTTCCAAA 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgLysAsnAsnHISGlnIleThr 140

Db	361	CTCATGATTTATATGACACTTTCTTTTCATCTCGGCAAGAAACAACCCACGATACAG	420
Qy	141	ValLeuHisValTyrHisHisAlaIleMetLeuAsnLettPrpPheValMetAsnTrp	160
Db	421	GTCCTGACAGTGTACCACCAATGCTCGATGCTGAACATCTGGTGTGGATGAACCTGG	480
Qy	161	ValProCysGlyHisSerTyrPheGlyAlaIleIleuAsnSerPheIleHisValLeuMet	180
Db	481	GTCCTCGGGCCACTCTTATTGGTGGCCAACTTAATAGCTTCATCCACGTCCTCAAG	540
Qy	181	TyrSerTyrTyrGlyIleuSerSerLettProSerMetArgProTyrLeuTyrTrpIleGly	200
Db	541	TACTCTTACTAATAGTTTGTGCTGAGTCCCTTCATGGCTGCATACCTCTGGTGAAGAAG	600
Qy	201	TyrIleThrGlnGlyIleuValGlnPheValIleuThrIleIleGlnThrTrnCysGly	220
Db	601	TACATCACTCAAGGGCAGCTGCTTCAAGTTGTGCTGCACATCACTCCAGACAGCTGGGG	660
Qy	221	ValPheTrpProCysSerPheProLeuGlyTyrIleuPhePheGlnIleGlyTyrMetIle	240
Db	661	GTCATGTGGCCCTGCACATCCCTCTTGTTGGTTGATTAATCCAGATGGATCATTAAT	720
Qy	241	SerLeuIleAlaIleuPheThrAsnPheTyrIleGlnThrTyrAsnIleSlyGlyAlaSer	260
Db	721	TCCCTGATGCTCTCTTTCACAACTTCTTACATCTCAAGCTTCAACACAGAAAGGGGCTCC	780
Qy	261	ArgArgIleAspHisIleuIleGlyHisIleGlnAsnGlySerValAlaIleValAsnGlyHis	280
Db	781	CGAAGGAAGACCACTGAAAGGACCAACAGAAATGGTCCGGGCTGCTGGAATGGCAC	840
Qy	281	ThrAsnSerPheProSerLeuGlnIleuAsnSerValIleProArgIleGlnArgIleAsp	299
Db	841	ACCAACAGGTTTTCACCCCTGGAAACAACTTGAAGCAAGAGAGCTGGGAAAGAT	897

RESULT 4

```

US-09-903-456-5
Sequence 5, Application US/09903456
Patent No. 6677145
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Surette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407 US P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 5
LENGTH: 879
TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-5

```

Alignment Scores:

Pred. No.:	1.09e-107	
Score:	956.50	Length: 875
Percent Similarity:	71.588	Matches: 36
Best Local Similarity:	58.958	Conservative: 36
Query Match:	57.938	Mismatches: 78
DB:	4	Indels: 3
		Gaps: 1

US-09-624-670-64 (1-299) x US-09-903-456-5 (1-879)

1 MetGluHisPheAspAlaSerLeuSerThrTyrPheLysAlaPheLeuGlyProArgAsp 20

Db	10	CTGAAAGCCTTGAATGAAGTCAATCTTTTGGACAACAATGTTTGAACAGAGAT	69	EARLIER APPLICATION NUMBER: 60/040,333
Qy	21	ThirValIyIsgIyTrpHeLeuAspAsnTrIleProThrPheValCysSerVal	40	EARLIER FILING DATE: 1997-03-07
Db	70	TCGAGAGTTCGGGGGGGTTCTCGTGGACCTTACCTTCCACCTTCACTCCACATC	129	EARLIER FILING DATE: 1997-03-07
Qy	41	IleTyrLeuIleValIleTrpLeuGlyProIyIyTrpMetIyAsnArgIlnProHeaer	60	EARLIER FILING DATE: 1997-03-07
Db	130	ACGTACTCTCTCGATATAGCTGGGAGTACAGATCAAGAAACAGAGGCTGCTGTCT	189	EARLIER FILING DATE: 1997-03-07
Qy	61	CysArgIyIleLeuGlnIleuTrpAsnLeuGlyIleuThrIleuLeuSerLeuTyrMetPhe	80	EARLIER FILING DATE: 1997-03-07
Db	190	CTCAGGGGAGTCTCACCCTGTATACCTCGCATCACTCTTTCTCGGATATAGCTG	249	EARLIER FILING DATE: 1997-03-07
Qy	81	TyrGlnIleuValIleGlyValIleTrpGlnIyIyTrpAsnPheCysGlnIyIleArg	100	EARLIER FILING DATE: 1997-03-07
Db	250	GTGGAGCTATCTCTCCAGCTGGAGAGAGTTACAACTTGACATGTACAGATCTGAC	309	EARLIER FILING DATE: 1997-03-07
Qy	101	SerValGlyIleuSerAspMetIyTrIleArgValIleuTrpTrpTyrTrpPheSerIys	120	EARLIER FILING DATE: 1997-03-07
Db	310	AGCGACAGAGAGAGTATGTCGGGTACCAAGCTCTGTGGTGGTATCTTCTCCAAA	369	EARLIER FILING DATE: 1997-03-07
Qy	121	LeuIleGlnPheMetAspThrPhePhePheIleLeuArgIyAsnAsnIleGlnIleThr	140	EARLIER FILING DATE: 1997-03-07
Db	370	CTATGGAGTCTCTGGACACGATTTCTTTCTTACGAAAAAGACATACAGATCAAC	429	EARLIER FILING DATE: 1997-03-07
Qy	141	ValIleHisValIleThrIleHisIlePheMetLeuAsnIleTrpTrpPheValMetAsnTrp	160	EARLIER FILING DATE: 1997-03-07
Db	430	TTCCTTCATGTCTATACACACCGCTCATGTTCAACATCTGGTGGTGTGTTTGAATGG	489	EARLIER FILING DATE: 1997-03-07
Qy	161	ValProCysGlyIleHisSerTyrPheGlyValIleThrLeuAsnSerPheIleHisValIleuMet	180	EARLIER FILING DATE: 1997-03-07
Db	490	ATACCTTGTGGTCAAAAGCTTCTTTGGACCCACCTGAAACGCTTTATCCACATTCATG	549	EARLIER FILING DATE: 1997-03-07
Qy	181	TyrSerTyrTyrGlyIleuSerSerIleProSerMetArgProTyrIleuTrpTrpIyIyIys	200	EARLIER FILING DATE: 1997-03-07
Db	550	TACTCTACTACGGGCTGTCTGTGTTCCCGTCCATGACAAAGTACCTTTGGTGAAGAAG	609	EARLIER FILING DATE: 1997-03-07
Qy	201	TyrIleThrGlnGlyIleuValGlnPheValIleuThrIleIleGlnThrThrCysGly	220	EARLIER FILING DATE: 1997-03-07
Db	610	TACTCATACAGGCTCAGCTGTGTGATCTTCTATCTACATCAACGACACGCGAGTGC	669	EARLIER FILING DATE: 1997-03-07
Qy	221	ValPheTrpProCysSerPheProLeuGlyIleTrpLeuPheGlnIleGlyTyrMetIle	240	EARLIER FILING DATE: 1997-03-07
Db	670	GTGTGAAGCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTCCATATAGAG	729	EARLIER FILING DATE: 1997-03-07
Qy	241	SerLeuIleAlaIleuPheThrAsnPheTyrIleGlnThrTyrAsnIyIyIsgIyIleSer	260	EARLIER FILING DATE: 1997-03-07
Db	730	ACCTGTGTCTCTGTTCTTAACTTCAATTTTACGACATACCGGAAAAACGACGTAAG	789	EARLIER FILING DATE: 1997-03-07
Qy	261	Arg-----ArgIyAspHisIleuIyIsgIyIleGlnAsnGlySerValAlaIleVal	277	EARLIER FILING DATE: 1997-03-07
Db	790	AAAGAGCTGCAAGAAAGAGTGAAGATGTTTCCCAAGCCCACTTAATGTGCT	849	EARLIER FILING DATE: 1997-03-07
Qy	278	AsnGlyHisIleThrAsn	282	EARLIER FILING DATE: 1997-03-07
Db	850	AATGGCATGCGGAC	864	EARLIER FILING DATE: 1997-03-07
RESULT 5				EARLIER APPLICATION NUMBER: 60/043,312
US-09-149-476-258				EARLIER FILING DATE: 1997-04-11
Sequence 258, Application US/09149476				EARLIER FILING DATE: 1997-04-11
Parent No. 6420526				EARLIER FILING DATE: 1997-04-11
GENERAL INFORMATION:				EARLIER FILING DATE: 1997-04-11
APPLICANT: Rosen et al.				EARLIER FILING DATE: 1997-04-11
TITLE OF INVENTION: 186 Human Secreted proteins				EARLIER FILING DATE: 1997-04-11
FILE REFERENCE: P2002P1				EARLIER FILING DATE: 1997-04-11
CURRENT APPLICATION NUMBER: US/09/149,476				EARLIER FILING DATE: 1997-04-11
CURRENT FILING DATE: 1998-09-08				EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: PCT/US98/04493				EARLIER FILING DATE: 1997-04-11
EARLIER FILING DATE: 1998-03-06				EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/040,162				EARLIER FILING DATE: 1997-04-11
EARLIER FILING DATE: 1997-03-07				EARLIER FILING DATE: 1997-04-11

```

EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,313
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,672
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,315
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/048,974
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/056,886
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,877
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,889
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,893
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,630
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,878
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,662
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,872
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,882
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,637
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,903
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,888
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,879
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,880
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,894
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,911
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,636
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,874
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,910
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,864
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,631
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,845
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,892
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,761
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/047,595
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,599
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,588
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,585
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,586
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,590
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,594
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,589
EARLIER FILING DATE: 1997-05-23

```

```

EARLIER APPLICATION NUMBER: 60/047,593
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,576
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/047,501
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,670
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/056,632
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,664
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,876
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,881
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,909
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,875
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,862
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,887
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,908
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/048,964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057,650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056,884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

```

```

Alignment Scores:
Pred. No.: 1,95e-48 Length: 1482
Score: 476.50 Matches: 103
Percent Similarity: 56.43% Conservative: 55
Best Local Similarity: 36.79% Mismatches: 97
Query Match: 28.86% Indels: 25
DB: 4 Gaps: 9

```

US-09-624-670-64 (1-299) X US-09-149-476-258 (1-1482)

```

QY 20 AspThrArgValIysGlyTrpPheLeuLeuAspAsnTrpIleProThrPheValCysSer 39
DB 139 GATCCCGGATCCAGGAGGCTACCTCTGATGGGGTCC-----CCCTGTATATGACCTCC 192
QY 40 ValIleTrpLeuLeuIleValTrp-----LeuGlyProIysTrpMetIysAsnArg 56
DB 193 ATTCTCTGACCTACGAGTCTGCTCTCTCTGACCTGGGCTTCGCTATGCTATCGG 252
QY 57 GluProPheSerCysArgGlyIleLeuGlnLeuTrpAsnLeuGlyLeuThrLeuLeuSer 76
DB 253 AAGCCCTTCAGGCTCCGTGCTCTTCAATGATGCTCAACTTCTCACTGGTGGCACTCTCC 312
QY 77 LeuTrpMetPheTrpGlnLeuValThrGlyValTrpGluGlyIysTrpAsnDhePheCys 96
DB 313 CTCACATGCTCTATATAGTCTCGATGCGGCTGCTGAGCACCCTATACCTGCGGCTGT 372
QY 97 GluGlyThrArgSerIleGlyIleGlyLeuSerAsp---MetIysIleIleLeuValLeuTrpTrp 115
DB 373 GACCTGTGACATTTTCCACAGCCCTGAGGACCTTAGATGTTGGGTGGCTGGCTC 432

```

QY 116 TyrTyrPheSerIysLeuIleGluPheMetAspThrPhePheIleLeuArgLysAsn 135
Db 433 TTCTCTTCTCCAGATTGATGAGTGAACAGAGATTTATTTCTCCAGAAAGAA 492
QY 136 AsnHisGlnIleThyValLeuHisValIleYrHisGlnIleMetLeuAsnIleTyrTrp 155
Db 493 GAGGGGAGGTGACCTTCTTACATGTCCTTCATCATCTGTCCTCCCTGAGGTGG 552
QY 156 PheValMetAsnIleTyrValProCysGlyHisSerIleTyrPheGlyAlaThrLeuAsnSerPhe 175
Db 553 TGGGGGGTAAAGATTGCCCGGAGAGATGGGCTCTTCATGCCATATTAACCTTCC 612
QY 176 IleHisValLeuMetIleTyrSerIleTyrGlyLeuSerSerIle--ProSerMetArgPro 194
Db 613 GTGATGTCTAATGATGACCGTGTACGATATATGCTTGGCCCTGTGGCAACACC 672
QY 195 TyrLeuTyrTrpIleYrIleThyPheGlnGlyGlnIleValGlnPheValIleThrIle 214
Db 673 TACCTTGTGTGAAAAAGACATGACAGCCATTCAGCTGATTCAGTTGTCTGGTCTCA 732
QY 215 Ile-----GlnThrCysGlyValPheTyrProCysSerPhe 227
Db 733 CTGACATCTCCAGTACTACTTATGTCACGCTGTAATACAGTACCAAGTATTT 792
QY 228 ProLeuGlyTyrLeuPhePheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThr 247
Db 793 CACCTCATCTGATGATGACACCATCTTCTTCATG-----CTGTCTCC 837
QY 248 AsnPheTyrIleGlnThrIleYrAsnIleYrGlyAlaSerArgLysAspHisIleLeuLys 267
Db 838 AACCTCTGATATACCTTATACCAAG-----GCCAGCGGCTCCCGCGCACTTCAG 891
QY 268 GlyHisGlnAsnGlySer-----ValAlaIleValAsnGlyHisThrAsnSerPhePro 285
Db 892 -----CAAATGAGCTCCAGGTATGTCACAGGTCAAGGCCCACTGAGAAAGCATGGCT 945

RESULT 6
US-09-149-476-106
Sequence 106, Application US/09149476
Patent No. 6420526
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 186 Human Secreted proteins
FILE REFERENCE: P2002P1
CURRENT APPLICATION NUMBER: US/09/149,476
EARLIER FILING DATE: 1998-09-08
EARLIER APPLICATION NUMBER: PCT/US98/04493
EARLIER FILING DATE: 1998-03-06
EARLIER APPLICATION NUMBER: 60/040,162
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,333
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/038,621
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,626
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,334
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,336
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,163
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/047,600
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,615
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,597
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,502
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,633
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,583

EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,617
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,618
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,503
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,592
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,581
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,584
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,500
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,587
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,492
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,598
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,613
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,582
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,596
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,612
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,632
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,601
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,580
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,568
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,314
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,569
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,311
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,671
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,674
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,669
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,312
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,313
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,672
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,315
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/048,974
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/056,886
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,877
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,889
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,893
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,630
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,878
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,662
EARLIER FILING DATE: 1997-08-22


```

EARLIER APPLICATION NUMBER: 60/056,872
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,882
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,637
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,903
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,888
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,879
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,880
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,894
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,911
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,636
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,874
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,910
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,864
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,631
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,845
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,892
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,761
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/047,595
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,599
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,588
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,585
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,586
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,590
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,594
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,589
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,593
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,576
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/047,501
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,670
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/056,632
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,664
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,876
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,881
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,909
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,875

```

```

EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,862
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,887
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,908
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/048,964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057,650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056,884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

Alignment Scores:
Pred. No.: 2,076-48      Length: 1542
Score: 476.50           Matches: 103
Percent Similarity: 56.43%      Conservative: 35
Best Local Similarity: 36.79%    Mismatches: 97
Query Match: 28,864           Indels: 25
DB: 4                     Gaps: 9

US-09-624-670-64 (1-299) x US-09-149-476-106 (1-1542)

Qy 20 AspThrArgValIysGlyTrpPheLeuLeuAspAsnTrpIleProThrPheValCysSer 39
Db 167 GATCCCCGAGATCCAGGCTTACCTCTGATGGGGTCC-----CCCTTGCTATGACCTCC 220
Qy 40 ValIleTrpLeuLeuValTrp-----LeuGlyProIleValMetCysAsnArg 56
Db 221 ATTCTCTGACCTACGATGATCTTCTCTCACTTGCGCCCTGATCATGCTATGCG 280
Qy 57 GluProPheSerCysArgGlyIleLeuGlnLeuTrpAsnLeuGlyLeuThrLeuLeuSer 76
Db 281 AAGCCCTTCAGCTCCGCTGATGCTTCAATGCTTCAACTCTCACTGATGCACTCTCC 340
Qy 77 LeuTrpMetCysTrpIleuValTrpGlnValTrpGlnGlyIleValTrpAsnMetCys 96
Db 341 CTCTACATGCTCTATAGTTCCTGATGCGGCTGCGAGCACTTACCTCGGCGCTGT 400
Qy 97 GlnGlyThrArgSerIleGlyIleSerAsp--MetIleIleIleArgValLeuTrpTrp 115
Db 401 GACCCGTGACATCTATCCAAACAGCCCTGAGGACCTTAGATGTTGGGTGCGCTGCTC 460
Qy 116 TyrTrpPheSerIleLeuIleGluPheMetAspTrpPhePheIleLeuArgIleAsn 135
Db 461 TTCTCTCTCCCAAGTTCATGAGCTGAGCGGAGGACAGAGATCTTATCTCCGAAGAAA 520
Qy 136 AsnHisGlnIleThrValLeuHisValTrpHisIleSalThrMetLeuAsnIleTrpTrp 155
Db 521 GACGGCGAGGTGACCTTCTCTACATGCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 580
Qy 156 PheValMetAsnTrpValProCysGlyIleSerTrpPheGlyIleValThrLeuAsnSerPhe 175
Db 581 TGGGGGGTAAAGATGCCCGGAGGAGATGGGCTTTTCCATGCATGATAAACTCTCC 640
Qy 176 IleHisValLeuMetTrpSerTrpTrpGlyIleSerIle---ProSerMetArgPro 194
Db 641 GTGATGTCAATATGATCCGTATGAGATATGATGCTTTGGCCCTGTGGACAAACC 700
Qy 195 TyrIleuTrpTrpIleValSerTrpIleThrGlnGlnIleValGlnPheValIleuThrIle 214
Db 701 TACCTTGTGGAAAAAGACATGACGACATTCATGCTATCCAGTTGTCTCTGCTCA 760
Qy 215 Ile-----GlnTrpTrpCysGlyValPheTrpProCysSerPhe 227
Db 761 CTGACATCTCCAGTACTACTTATGATCCAGCTGTACTACCAAGTACCACTCATTTATT 820

```

QY 228 ProLeuGlyTrrPheLeuPheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThr 247
 Db 821 CACCATCATCTGGATGATGACGACCATCTTCTCATG-----CTGTCTCC 865
 QY 248 AsnPheTyrIleGlnThrTyrAsnTyrGlyAlaSerArgArgLysAspHisLeuLys 267
 Db 866 AACTCTCTGGATCATCTTATACCAAG-----GGCAAGCGGCTGCCCGTGCACTTCAG 919
 QY 268 GlyHisGlnAsnGlySer-----ValAlaAlaValaGlnGlyHisThrAsnSerPhePro 285
 Db 920 -----CAAAATGAGTCCAGGTATGCGAAGTCAAGGCCCACTGAGAACTGAGCT 973

RESULT 7 US-09-023-655-430

/ Sequence 430, Application US/09023655
 / Patent No. 6607872
 / GENERAL INFORMATION:
 / APPLICANT: Cocks, Benjamin G.
 / APPLICANT: Susan G. Stuart
 / APPLICANT: Jeffrey J. Seilhamer
 / TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
 / TITLE OF INVENTION: EXPRESSION
 / NUMBER OF SEQUENCES: 1508
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
 / STREET: 3174 PORTER DRIVE
 / CITY: PALO ALTO
 / STATE: CALIFORNIA
 / COUNTRY: USA
 / ZIP: 94304

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/023,655

FILING DATE: HEREWITH
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Zeller, Karen J.
 REGISTRATION NUMBER: 37,071
 REFERENCE/DOCKET NUMBER: PA-0001 US
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (650) 955-0555
 TELEFAX: (650) 845-4166

INFORMATION FOR SEQ ID NO: 430:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1812 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 IMMEDIATE SOURCE:
 LIBRARY: URETTU01
 CLONE: 1658706
 US-09-023-655-430

Alignment Scores:
 Pred. No.: 4.5e-47 Length: 1812
 Score: 466.50 Matches: 101
 Percent Similarity: 56.32% Conservative: 55
 Best Local Similarity: 36.46% Mismatches: 96
 Query Match: 28.26% Indels: 25
 DB: 4 Gaps: 9

US-09-624-670-64 (1-299) X US-09-023-655-430 (1-1812)

QY 23 VallysgLYTrrPheLeuLeuAspAsnTyrIleProThrPheValCysSerValIleTyr 42

Db 503 ATCCAGGCGTACCCCTCTATGAGGCTCC-----CCCTTGCTAATGACCTCATCTCCCTG 556
 QY 43 LeuLeuIleValTrrP-----LeuGlyProLysTyrMetLysAsnAlaGlnProPhe 59
 Db 557 ACCTAAGTCACTGCTGCTCTCTCTCACTTGGGCTGCACTGCTGCTGCTGCTGCTGCTGCTG 616
 QY 60 SerCysArgGlyIleLeuGlnLeuTyrAsnLeuLysLeuThrLeuLeuSerLeuTyrMet 79
 Db 617 CAGCTCCGCTGCTCATATGCTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACTT 676
 QY 80 PheTyrGlnLeuValThrGlyValTrrPGLnLysTyrAsnPhePheCysGlnGlyThr 99
 Db 677 GCTATGAGTCTCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 736
 QY 100 ArgSerAlaGlyLysAsp---MetLysIleLeuValLeuTrrPrrTrrPrrPhe 118
 Db 737 GACTATTCACAGCCCTGAGGACCTTGAAGTGGTGGGCTGCTGCTGCTGCTGCTGCTGCTG 796
 QY 119 SerLysLeuIleGluPheMetAspThrPhePheIleLeuArgLysAsnAsnHisGln 138
 Db 797 TCCAGTTCATGAGCTGATGACACAGTATCTTATTCCTCCGAAGAAGAGCGGCGAG 856
 QY 135 IietrrValLeuHisValTrrHisAlaThrMetLeuAsnIleTrrPrrPheValMet 158
 Db 857 GTGACCTTCCTACAGTCTTCATCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 916
 QY 159 AsnTrrValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisVal 178
 Db 917 AAGATTGCCCGGAGAGATGGCTCTTCCATCCATGATTAACCTTCCTGCGGATGTC 976
 QY 179 LeuMetTyrSerTyrTrrGlyLeuSerSerIle---ProSerMetArgProTrrLeuTrr 197
 Db 977 ATAAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1036
 QY 198 TrrLysLysTrrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIle----- 215
 Db 1037 TGGAAAAGCATACAGCCCATTCAGTGTATTCAGATTTGCTGCTGCTGCTGCTGCTGCTG 1096
 QY 216 -----GlnThrThrCysGlyValaPheTrrProCysSerPheProLeuGly 230
 Db 1097 TCCAGTACTACTTATGCTCAGCTGATACACAGTACACAGTACATTAATTCACCTCATC 1156
 QY 231 TrrPhePhePheGlnIleGlyTrrMetIleSerLeuIleAlaLeuPheThrAsnPheTyr 250
 Db 1157 TGGATGATGCGACCATCTTCTCATG-----CTGTCTCCAACTTCTGG 1201
 QY 251 IieGlnThrTyrAsnLysGlyAlaSerArgArgLysAspHisLeuLysGlyHisGln 270
 Db 1202 TATCACTCTTATACCAAG-----GGCAAGCGGCTGCCCGTGCACTTCAG-----CAA 1249
 QY 271 AsnGlySer-----ValAlaAlaValaGlnGlyHisThrAsnSerPhePro 285
 Db 1250 AATGAGCTCCAGGTATGCGAAGTCAAGGCCCACTGAGAACTGAGCT 1300

RESULT 8

US-09-903-456-7
 / Sequence 7, Application US/09903456
 / Patent No. 6677145
 / GENERAL INFORMATION:
 / APPLICANT: Abbott Laboratories
 / APPLICANT: Mukerji, Pradip
 / APPLICANT: Leonard, Amanda Eun-Yeong
 / APPLICANT: Huang, Yung-Sheng
 / APPLICANT: Peretia, Suzette L.
 / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 / FILE REFERENCE: 6407 US.93
 / CURRENT APPLICATION NUMBER: US/09/903,456
 / PRIOR FILING DATE: 2001-07-11
 / PRIOR APPLICATION NUMBER: US 09/624,670
 / PRIOR FILING DATE: 2000-07-24
 / PRIOR APPLICATION NUMBER: US 09/379,095
 / PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 7
 LENGTH: 819
 TYPE: DNA
 ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-7

Alignment Scores:

Pred. No.:	6,696-39	Length:	819
Score:	395.50	Matches:	94
Percent Similarity:	53.49%	Conservative:	44
Best Local Similarity:	36.43%	Mismatches:	100
Query Match:	23.96%	Indels:	20
DB:	4	Gaps:	6

US-09-624-670-64 (1-299) x US-09-903-456-7 (1-819)

```

QY 17 GlyProArg-AspThrArgValIysGlyTTP-----PheLeuLeuAs 30
DB 33 GGGCCGCGTGAAGACCGCGTGAAGACGATGATGGCCCAAGCCGTAACGACTCAC 92
QY 30 pAsnTyrIleProThrPheValCysSerValIle-----TyrLeuLe 44
DB 93 CGATGGGCTCCGATGATGACGATGCCATCGCTGCGATTCGAGGTGGATATCATGCC 152
QY 44 uIleValTrrPleuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgI 63
DB 153 CATGCTGCTTCGGCATCCGATCATGACAGATGAGAGAGCTTTTACGCTCAAGAC 212
QY 63 YlleuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPheTyrGluLe 83
DB 213 CATCAAGCTCTGACACACTGTTCTCTTCGACCTTCCTTGACATGTCGCTGAGAC 272
QY 83 uValThrGlyValTrrPleuGlyLysTyrAsnPhePheCysGlnGlyThrArgSerLacI 103
DB 273 CATCCGCAAGCTATCTCCGAGGCTACAAAGTGTGGAAAGCAATGAGAGGCA 332
QY 103 YGluSerAspMetLys---IleIleArgValLeuTrrPrrTyrTyrPheSerLysLeuI 122
DB 333 CGAGTCTCATGCTCAGGCGATGCTCGGATCGTACGTTGACGTCGCAAGGCATA 392
QY 122 eGlnPheMetAspTrrPrrPhePheIleLeuArgLysAsnAsnIleGlnIleThrValLe 142
DB 393 CGAGTCTCATGCTCAGGCGATGATCCCTTTCGAAAGATTCACACCGATTCCTT 452
QY 142 uHisValTrrHisHisAlaThrMetLeuAsnIleTrrTrrPheValMetAsnTrrValPr 162
DB 453 GCATGTGATACCAACATGCACTTTTGGCATCTGTGGCTATGCCCAAGTACCTCC 512
QY 162 oCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMetTyrSe 182
DB 513 AGGAGGTATGATGCTTTCAGTATCTTCATCCTTTCGTCGACACCCATGATACCC 572
QY 182 rTyrTrrGlyLeuSerSer-----IleProSerMetArgProTrrLeuTrrPrrLysL 200
DB 573 ATACTACTTCTTCTCTCCCAAGGCTTCGCTTGTGATAGCAATC-----AAGCC 623
QY 200 eTrrIleThrGlnGlnGlnLeuValGlnPheValLeuThrIleIleGlnThrArgCysG 220
DB 624 GATCATCAACACCCCTCATGATGACCAAGTTCATGAGCAATGCTGTGACAGCTTGA 683
QY 220 yValPheTrrProCysSerPheProLeuGlyTrrPleuPhePheGlnIleLeuTyrMetI 240
DB 684 CTACTCTTCCATGCGATGACCAACAGGCTCTTGTGACAGCTCTTGGAGTGAACATGAT 743
QY 240 eSerLeuIleAlaLeuPheThrAsnPheTrrIleGlnThrTyrAsnLysLys 257
DB 744 CACCTTGTCTGCTTCTTCCGCAACTTTTGTGTCAGAGCTATCTTAAAG 795

```

RESULT 9

US-09-903-456-72

Sequence 72, Application US/09903456
 Patent No. 6677145
 GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Leonard, Amanda Eun-Yeong
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 FILE REFERENCE: 6407 US P3
 CURRENT APPLICATION NUMBER: US/09/903,456
 CURRENT FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24
 PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 72
 LENGTH: 819
 TYPE: DNA
 ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-72

Alignment Scores:

Pred. No.:	6,696-39	Length:	819
Score:	395.50	Matches:	94
Percent Similarity:	53.49%	Conservative:	44
Best Local Similarity:	36.43%	Mismatches:	100
Query Match:	23.96%	Indels:	20
DB:	4	Gaps:	6

US-09-624-670-64 (1-299) x US-09-903-456-72 (1-819)

```

QY 17 GlyProArg-AspThrArgValIysGlyTTP-----PheLeuLeuAs 30
DB 33 GGGCCGCGTGAAGACCGCGTGAAGACGATGATGGCCCAAGCCGTAACGACTCAC 92
QY 30 pAsnTyrIleProThrPheValCysSerValIle-----TyrLeuLe 44
DB 93 CGATGGGCTCCGATGATGACGATGCCATCGCTGCGATTCGAGGTGGATATCATGCC 152
QY 44 uIleValTrrPleuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgI 63
DB 153 CATGCTGCTTCGGCATCCGATCATGAGAGATGAGAGAGCTTTTACGCTCAAGAC 212
QY 122 eGlnPheMetAspTrrPrrPhePheIleLeuArgLysAsnAsnIleGlnIleThrValLe 83
DB 213 CATCAAGCTCTGACACACTGTTCTCTTCGACCTTCCTTGACATGTCGCTGAGAC 272
QY 83 uValThrGlyValTrrPleuGlyLysTyrAsnPhePheCysGlnGlyThrArgSerLacI 103
DB 273 CATCCGCAAGCTATCTCCGAGGCTACAAAGTGTGGAAAGCAATGAGAGGCA 332
QY 103 YGluSerAspMetLys---IleIleArgValLeuTrrPrrTyrTyrPheSerLysLeuI 122
DB 333 CGAGTCTCATGCTCAGGCGATGCTCGGATCGTACGTTGACGTCGCAAGGCTTCTT 452
QY 122 eGlnPheMetAspTrrPrrPhePheIleLeuArgLysAsnAsnIleGlnIleThrValLe 142
DB 393 CGAGTCTCATGCTCAGGCGATGATCCCTTTCGAAAGATTCACACCGATTCCTTCT 452
QY 142 uHisValTrrHisHisAlaThrMetLeuAsnIleTrrTrrPheValMetAsnTrrValPr 162
DB 453 GCATGTGATACCAACATGCACTTTTGGCATCTGTGGCTATGCCCAAGTACCTCC 512
QY 162 oCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMetTyrSe 182
DB 513 AGGAGGTATGATGCTTTCAGTATCTTCATCCTTTCGTCGACACCCATGATACCC 572

```

```

QY 182 rTyrTyrGlyLeuSerSer-----1LeProSerMetArgProTyrLeuTyrTrpTyrLeu 200
Db 573 ATACTACTCTCTCTCTCCCAAGGCTTCGGTTCGTAAGCAATC-----AAGCC 623
QY 200 sTyrTyrThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrTrpGly 220
Db 624 GTCATCATCACACCTTCATGATGACCCAGTTCATGCAATGCTTGCGAGTCTTGTAACA 683
QY 220 yAlaPheTyrProCysSerPheProLeuGlyTyrPhePheGlnIleGlyTyrMetIle 240
Db 684 CTACCTCTTCCCATGAGCATCACCAAGGCTCTTGAGAGCTTTCGAGTGTACATGAT 743
QY 240 eSerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnLeuValys 257
Db 744 CACCTTGCTTGCCCTCTTCGGCAACTTTTGTGCAAGACTATCTTAAAAAG 795

```

RESULT 10

```

US-09-903-456-73
/ Sequence 73: Application US/09903456
/ Patent No. 6677145
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Pereira, Suzette U.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407.US.P3
/ CURRENT APPLICATION NUMBER: US/09/903,456
/ CURRENT FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02
/ NUMBER OF SEQ ID NOS: 116
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 73
/ LENGTH: 819
/ TYPE: DNA
/ ORGANISM: Thraustochytrium aureum
US-09-903-456-73

```

Alignment Scores:

```

Pred. No.: 2,076-38 Length: 819
Score: 391.50 Matches: 92
Percent Similarity: 52.45% Conservative: 47
Best Local Similarity: 34.72% Mismatches: 107
Query Match: 23.71% Indels: 19
Gaps: 6

```

US-09-624-670-64 (1-299) x US-09-903-456-73 (1-819)

```

QY 9 SerThrTyrPheLeuAlaPheLeuGlyProArgAspThrArgValysGlyTyr----- 26
Db 10 AGCAGGCTGTGGATGTGTGTGGCCCGCGTGAAGACCGGCTGGAACATGATGAT 69
QY 27 -----PheLeuLeuAspAsnTyrIleProThrPheValCysSerValIle---- 41
Db 70 GGGCGCAAGCGGTACCACTCAACGATGGCTCCGATGATGAGACGTGTCACCATCTG 129
QY 42 -----TyrLeuLeuIleValITrpleuGlyProLysTyrMetLeuAsn--- 55
Db 130 GCATTGAGGTGGATACATGGCCATGCTGCTTCGCGATCCGATATGAAACAATG 189
QY 56 ArgGlnProPheSerCysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeu 75
Db 190 GAGAACCTTTTGTAGTCAAGACCATCAAGCTCTTGCAACAACCTGTTCTTCGGA 249
QY 76 SerLeuTyrMetCysPheTyrGlnLeuValIThrGlyValITrpleuGlyLysTyrAsnPhe 95
Db 250 TCCCTGTACTGTGCTGTGAGACCATCCGCCAGGCTATCTTCGAGGCTTACAAAGT 309

```

```

QY 96 CysGlnGlyThrArgSerAlaGlyGluSerAspMetLys---1LeIleArgValLeuTyr 114
Db 310 GGAAGACGATGAGGAAGAGGCAAGAGCTCATGCTCAGGCAATGTCTGCATCGTGTAC 369
QY 115 TrpTyrTyrPheSerTyrLeuIleGluPheMetAspThrPhePheIleLeuValys 134
Db 370 GTGTTCTAGCGTTCACAGGATACAGAGTCTTGATACCGCATCATGATCTTTGCAAG 429
QY 135 AsnAsnIleGlnIleThrValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyr 154
Db 430 AAGTTCACACAGGTTCTCTTCTTGACACCGACCATGACCATTTTGGCATGTG 489
QY 155 TrpPheValMetAsnTrpValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSer 174
Db 490 TGGGCTATCGCAAGTACGCTCCAGAGGATATCGTATCTTTCATGATCATCACTCT 549
QY 175 PheIleHisValLeuMetTyrSerTyrTyrGlyLeuSerSer-----1LeProSerMet 192
Db 550 TTGATGACACCGCTATGATACGATCACTCTTCTTCCTCCAGGCTTCGGGTTCTGT 609
QY 193 ArgProTyrLeuTyrTrpTyrLeuTyrIleThrGlnGlyGlnLeuValGlnPheValLeu 212
Db 610 AAGCAATC-----AAGCCATCATCAACACCTTCAGATGACCCAGTTCATGCA 660
QY 213 ThrIleIleGlnThrTrpCysGlyValPheTrpProCysSerPheProLeuGlyTyrPhe 232
Db 661 ATGCTTGACGACTCTGTATACGATCACTCTCCACGACACCAACCAAGGCTCTGTG 720
QY 233 PhePheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThrAsnPheTyrIleGln 252
Db 721 CAGCTTCTTGAGAGTACATATCATCCTTGCTTCCTTCCTTCGCAACTTTTGTGCA 780
QY 253 ThrTyrAsnLeuValys 257
Db 781 AAGCTATCTTAAAAAG 795

```

RESULT 11

```

US-09-621-976-12605
/ Sequence 12605: Application US/09621976
/ Patent No. 6639063
/ GENERAL INFORMATION:
/ APPLICANT: Dumas Milne Edwards, J.B.
/ APPLICANT: Giordano, J.Y.
/ TITLE OF INVENTION: ESTs and Encoded Human Proteins.
/ FILE REFERENCE: GENSET.054PR2
/ CURRENT APPLICATION NUMBER: US/09/621,976
/ CURRENT FILING DATE: 2000-07-21
/ NUMBER OF SEQ ID NOS: 19335
/ SOFTWARE: Patent.pm
/ SEQ ID NO 12605
/ LENGTH: 377
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-09-621-976-12605

```

US-09-621-976-12605

Alignment Scores:

```

Pred. No.: 7,086-39 Length: 377
Score: 391.00 Matches: 71
Percent Similarity: 96.15% Conservative: 4
Best Local Similarity: 91.03% Mismatches: 3
Query Match: 23.68% Indels: 0
Gaps: 0

```

US-09-624-670-64 (1-299) x US-09-621-976-12605 (1-377)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheLeuAlaPheLeuGlyProArgAsp 20
Db 144 ATGAACACTTTTGTAGTCACTACATGTAACCTATTCAAGCAAGCATGCGAGGAT 203
QY 21 ThrArgValysGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40

```

Db 204 ACTAGAGTAAGAGATGTTCTTCTGCAACATATATACCACTTATCTGCTCTGTC 263
 Qy 41 ILeTyleuLeuIleValTTPLeuGlyProLySTyMeLysAsnArgGlnProPheSer 60
 Db 264 ATATATTTACTAATGTGATGTGCGGACCAAAATATCATAGAGAAATAACAGCACTCTCT 323
 Qy 61 CyArGgLyIleLeuGlnLeuTyraAsnLeuGlyLeuThrLeuLeuSerLeuTyf 78
 Db 324 TGCCGGGGGATTTTATGTGTGTATTAASCTTGGACATCACTGCTCTCTCTGTAT 377

RESULT 12
 US-09-903-456-70
 ; Sequence 70, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 70
 ; LENGTH: 819
 ; TYPE: DNA
 ; ORGANISM: Thraustochytrium aureum
 US-09-903-456-70

Alignment Scores:
 Pred. No.: 2,75e-38 Length: 819
 Score: 390.50 Matches: 94
 Percent Similarity: 53.10% Conservative: 43
 Best Local Similarity: 36.43% Mismatches: 101
 Query Match: 23.65% Indels: 20
 Gaps: 6

US-09-624-670-64 (1-299) x US-09-903-456-70 (1-819)

Qy 17 GLyProArg-AspThrArgVallysglyTTP-----PheLeuLeuAs 30
 Db 33 GGGCCGGGTGGAGCCGGCGGTGGACCAAGTGGATGATGCGCCAGCCGTAACACTCAC 92
 Qy 30 pAsnTyfIleProThrPheValCyseSerValIle-----TyfLeuLe 44
 Db 93 CGATGGGCCCCCGATGATGATGACGCGTCCACCATGCGGATTCGAGTGGATACATGCG 152
 Qy 44 uIlleValTTPLeuGlyProLySTyMeLysAsn---ArgGlnProPheSerCyArG 63
 Db 153 CATCTGCTCTTCCGACATCCCGATCATGAGACGATGAGAGAGCCCTTTGAGCTCAAGAC 212
 Qy 63 yIlleuGlnLeuTyraAsnLeuGlyLeuThrLeuLeuSerLeuTyfMePheTyG 83
 Db 213 CATCAAGCTCTTGACAACTGTTCTCTTCCGACCTTCTGATCATGTGCGTGGAGAC 272
 Qy 83 uValThrGlyValTTPGlnGlyTyfTyraAsnPhePheCyGlnGlyThrArgSerAlaG 103
 Db 273 CATCCGCGAGGCTATCTCGAGGCTACAAAGTGTGGAAAAGCATGAGAGAGGCGAA 332
 Qy 103 yGlnSerAspMetLys---IleIleArgValLeuTTPTyfTyfPheSerLeuLeu 122
 Db 333 CGAATCTCATGCTTAGGGACATGTCTCGCATGTGTACGCGGCTTACGTCTCAAGGACATA 392
 Qy 122 eGlnPheMetAspThrPhePhePheIleLeuArgLysAsnAsnHISglnIleThrValle 142

Db 393 CGAGTCTTGATATACCGCATCATATCTTTGCAAGAGTTCACACAGGTTCTCTT 452
 Qy 142 uHisValTyfHISHisAlaThrMetLeuAsnIleTyfTyfPheValMetAsnTTPValPr 162
 Db 453 GCATGTGTACCAACCATATGCGACCATTTTGGCATCTGGGGGCTATTCGCAAGTACGCC 512
 Qy 162 oCyGlyHisSerTyfPheGlyAlaThrLeuAsnSerPheIleHisValleuMetTyfSe 182
 Db 513 AGAGGTATATGCGTACTTTTTCAGTATCTCACTTTCTGATGACACCGCATGTAGCG 572
 Qy 182 rTyfTyfGlyLeuSerSer-----IleProSerMetArgProTyfLeuTyfTyfLy 200
 Db 573 ATACTACTCTTCTCTCCCAAGGTTGCGGTTGCGTGAAGCAATC-----AAGCC 623
 Qy 200 sTyfIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrTyfG 220
 Db 624 GTACATCACCACTTCATGATACCAAGCTTTCATGCAATGCTTGTGACGTCTGTACGA 683
 Qy 220 yValPheTyfProCyseSerPheProLeuGlyTyfLeuPhePheGlnIleGlyTyfMe 240
 Db 684 CTACCTCTTCCATGATGATGACCAAGGCTCTTGTGACAGCTTGTGAGTGTATCATAT 743
 Qy 240 eSerLeuIleAlaLeuPheThrAsnPheTyfIleGlnThrTyfAsnLyS 257
 Db 744 CACCTGCTTGCCTCTTCTGCGCACTTTTGTGTGACAGCTATCTTAAAG 795

RESULT 13
 US-09-903-456-71
 ; Sequence 71, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 71
 ; LENGTH: 818
 ; TYPE: DNA
 ; ORGANISM: Thraustochytrium aureum
 US-09-903-456-71

Alignment Scores:
 Pred. No.: 4,82e-38 Length: 818
 Score: 388.50 Matches: 93
 Percent Similarity: 53.10% Conservative: 44
 Best Local Similarity: 36.05% Mismatches: 101
 Query Match: 23.53% Indels: 20
 Gaps: 6

US-09-624-670-64 (1-299) x US-09-903-456-71 (1-818)
 Qy 17 GLyProArg-AspThrArgVallysglyTTP-----PheLeuLeuAs 30
 Db 32 GGGCCGGGTGGAGACGCGTGGACCAAGTGGATGATGCGCCAGCCGTAACACTCAC 91
 Qy 30 pAsnTyfIleProThrPheValCyseSerValIle-----TyfLeuLe 44
 Db 92 CGATGGGCTCCGATGATGATGACGCTGTCCACCATGCTGCAATTCAGGTGGATATACATGCG 151

```

QY      44  uilevaltrpleuglyprolystyrmetylsasn---ArgGlnProPheSerCyArgGI 63
      152  CATGCTGCTCTTGGGCAATCCGATCATGAAGAGATGAGAAAGCCCTTTGAGCTCAAGAC 211
QY      63  ylleleuglnleuTyraAsnleuGlyleuThrleuSerLeuTyrmecPheTyrgIule 83
      212  CATCAAGCTCTTGACACACTGTTCTCTTCGAGCTTCTCTGTCATCATGTGGTGGAGAC 271
QY      83  uvaltrnglyvaltrpGlyGlylystyraAsnPhelPheCyseGlnGlyThrArgSerAlaGI 103
      272  CATCCGCCAGGCTATCCTCGAGGCTACAAAGTGTGGAAACGACATGAGAAAGGCCAA 331
QY      103  yGlySerAspMetLys---llelleArgValleuTrpTrpTyrrTyrrPheSerLysLeu11 122
      332  CGAGTCTCATGCTCAGGAGCATGTCTGCATCGTACGCTTCTTCAAGTCCAGGACATA 391
QY      122  eGlyPheMetAspThrPhePhePheIleleuArglyAsnAsnAsnIsglnIleThrValle 142
      392  CGAGTCTCTGATACCGCCATCATGATCCTTTGCAAGAGATTCAACACAGGTTTCTCTT 451
QY      142  uHlsvalTyrrHlsAlaThrMetLeuAsnIleTrpTrpPheValMetAsnTrpValPr 162
      452  GCAAGTATACCAACCAATGCCAATTTTGGCATTTGGTGGCTATGCGCAAGTACGCTCC 511
QY      162  oCyseGlyHisSerTyrrPheGlyValaThrleuAsnSerPheIleHlsValleuMetTyrrSe 182
      512  AGGAGGTGATGCGGACTTTTCACTGATTCCTCAACTCTTTCGTCGACACCGCATATAGC 571
QY      182  rTyrrTyrrGlyLeuSerSer-----lleProSerMetArgProTyrrLeuTrpTrpLysly 200
      572  ATACTACTTCTTCTCTCCGCCAAGGGTTCGGGTTGCGAAGCCCAATC-----AAGCC 622
QY      200  sTyrrIleThrGlnGlyGlnleuValGlnPheValleuThrIleIleGlnThrThrcyGI 220
      623  GTACATACCAACCTTCAGATGACATGCCAGTTCAGGAAATGCTTGAGAGTCTCTGTAGCA 682
QY      220  yValPheTrpProCyseSerPheProleuGlyTrpleuPhePheGlnIleGlyTyrrMetI1 240
      683  CTACCTCTTCCCATGACCATCCACAGGCTCTTGTGACAGCTCTTGTGAGTGTACATAT 742
QY      240  eSerLeuIleAlaLeuPheThrAsnPheTyrrIleGlnThrTyraAsnLyslySe 257
      743  CACCTTGCTGCTCTCTTCCGCAACTTTTGTGACAGCTATCTTAAAG 794

```

RESULT 14
 US-09-903-456-69
 ; Sequence 69, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; PRIOR FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 69
 ; LENGTH: 819
 ; TYPE: DNA
 ; ORGANISM: *Thraustochytrium aureum*
 ; US-09-903-456-69

```

Pred. No.:      8,51e-38      Length:      819
Score:          286.50      Matches:      93
Percent Similarity: 53.10%      Conservative: 44
Best Local Similarity: 36.05%      Mismatches: 101
Query Match:    23.41%      Indels:      20
DB:             4          Gaps:         6

US-09-624-670-64 (1-299) x US-09-903-456-69 (1-819)

QY      17  GlyProArg-AspThrArgValLysGlyTrp-----PheLeuLeuAs 30
      33  GGGCCCGGTGAGAGCCGGCGGTGACCACTGATGATGAGCGCCAAAGCCGTAACGACATCAC 92
QY      30  pAsnTyrrIleProThrPheValCyseSerValIle-----TyrrLeuLe 44
      93  CGATGGGCTCCCGATGATGAGACGTCTCCACCATGCTGGCATTCGAGGTGGATATCATAGGC 152
QY      44  uilevaltrpleuglyprolystyrmetylsasn---ArgGlnProPheSerCyArgGI 63
      153  CATGCTGCTCTTGGGCAATCCGATCATGAAGAGATGAGAAAGCCCTTTGAGCTCAAGAC 212
QY      63  ylleleuglnleuTyraAsnleuGlyleuThrleuSerLeuTyrmecPheTyrgIule 83
      213  CATCAAGCTCTTGACACACTGTTCTCTTCGAGCTTCTCTGTCATCATGTGGTGGAGAC 272
QY      83  uvaltrnglyvaltrpGlyGlylystyraAsnPhelPheCyseGlnGlyThrArgSerAlaGI 103
      273  CATCCGCCAGGCTATCCTCGAGGCTACAAAGTGTGGAAACGACATGAGAAAGGCCAA 332
QY      103  yGlySerAspMetLys---llelleArgValleuTrpTrpTyrrTyrrPheSerLysLeu11 122
      333  CGAGTCTCATGCTCAGGAGCATGTCTGCATCGTACGCTTTCGCGTTCACAGGACATA 392
QY      122  eGlyPheMetAspThrPhePhePheIleleuArglyAsnAsnAsnIsglnIleThrValle 142
      393  CGAGTCTCTGATACCGCCATCATGATCCTTTGCAAGAGTTCACACAGGTTTCTCTT 452
QY      142  uHlsvalTyrrHlsAlaThrMetLeuAsnIleTrpTrpPheValMetAsnTrpValPr 162
      453  GCAATGATACCAACCAATGCCAATTTTGGCATTTGGTGGCTATGCGCAAGTACGCTCC 512
QY      162  oCyseGlyHisSerTyrrPheGlyValaThrleuAsnSerPheIleHlsValleuMetTyrrSe 182
      513  AGGAGGTGATGCGGACTTTTCACTGATTCCTCAACTCTTTCGTCGACACCGCATATAGC 572
QY      182  rTyrrTyrrGlyLeuSerSer-----lleProSerMetArgProTyrrLeuTrpTrpLysly 200
      573  ATACTACTTCTTCTCTCCGCCAAGGGTTCGGGTTGCGAAGCCCAATC-----AAGCC 623
QY      200  sTyrrIleThrGlnGlyGlnleuValGlnPheValleuThrIleIleGlnThrThrcyGI 220
      624  GTACATACCAACCTTCAGATGACATGCCAGTTCAGGAAATGCTTGAGAGTCTCTGTAGCA 683
QY      220  yValPheTrpProCyseSerPheProleuGlyTrpleuPhePheGlnIleGlyTyrrMetI1 240
      684  CTACCTCTTCCCATGACCATCCACAGGCTCTTGTGACAGCTCTTGTGAGTGTACATAT 743
QY      240  eSerLeuIleAlaLeuPheThrAsnPheTyrrIleGlnThrTyraAsnLyslySe 257
      744  CACCTTGCTGCTCTCTTCCGCAACTTTTGTGACAGCTATCTTAAAG 795

```

RESULT 15
 US-09-903-456-74
 ; Sequence 74, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P3

Alignment Scores:

CURRENT APPLICATION NUMBER: US/09/903,456
 CURRENT FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24
 PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO 74
 LENGTH: 819
 TYPE: DNA
 ORGANISM: Thraustochytrium aureum
 US-09-903-456-74

Alignment Scores:

Pred. No.:	1,13e-37	Length:	819
Score:	385.50	Matches:	92
Percent Similarity:	53.10%	Conservative:	45
Best Local Similarity:	35.66%	Mismatches:	101
Query Match:	23.35%	Indels:	20
DB:	4	Gaps:	6

US-09-624-670-64 (1-299) x US-09-903-456-74 (1-819)

```

QY 17 GIProArg-AspThrArgValLysGlyTrp-----PheLeuLeuAs 30
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 33 GGGCCGCGTGAAGACCGCGCTGGACCACTGATGGCGCCAGCCGTACGACTCAC 92
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 30 pAsnTyrlleProThrPheValCysSerValIle-----TyrleuLe 44
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 93 CGATGGGCTCCCGATGATGACGATGACCATGCTGACATTCGAGGTGGATACATGGC 152
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 44 uIleValTrpLeuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgG 63
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 153 CATGGCTCTTGGCATCCGATCCGATCATGAGGACATGAGAGCCTTTGAGCTCAAGAC 212
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 63 yIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPheTyrGluLe 83
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 213 CATCAAGCTCTTGCAACACTGTTCTCTTCTGACCTTCTTGACATGTGCGGTGAGAC 272
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 83 uValThrGlyValTrpGluGlyLysTyrAsnPhenCysGlnGlyThrArgSerAlaG 103
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 273 CATCCGCGAGGCTATCTTGGAGGCTACAAAGTGTGAAACGACATGAGAGGAGCA 332
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 103 yGlnSerAspMetLys---IleIleArgValLeuTrpTyrTyrPheSerLysLeuI 122
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 333 CGAGTCTCATGTCTAGGGCATGTCTCGCATGTGTACGTGTCTACGTGTCCAAAGGACATA 392
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 122 eGlnPheMetAspThrPhePhePheIleLeuArgLysAsnAsnIleGlnIleThrValLe 142
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 393 CGAGTCTTGGATACCGCATCATGATCTTTCAGAGAGTCAACAGGTTCTCTTCTT 452
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 142 uHisValTyrHisHisAlaThrMetLeuAsnIleTrpTrpPheValMetAsnTrpValPr 162
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 453 GCATGTGTACCAACATGACCACTTTTGGCATCTGGAGGCTATGCCCAAGTACGCTCC 512
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 162 pCysGlnHisSerTyrPheGlnAlaThrLeuAsnSerPheIleHisValLeuMetTyrSe 182
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 513 AGGAGGTGATGGGTACTTTCAGATGATCTCAACTCTTTCGTGACACCGCATGTACGCG 572
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 182 rTyrTyrGlyLeuSerSer-----IleProSerMetArgProTyrIleuTrpTrpLys 200
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 573 ATACTACTTCTTCTCTCCCAAGGTTCCGGGTTGAGGCCAATC-----AAGCC 623
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 200 eTyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysG 220
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 624 GTACATCACACCCCTTCAGATGACCACTTTCATGCAATGCTGTGCAATGCTTGTACGA 683
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 220 yValPheTrpProCysSerPheProLeuGlyTyrIleuPhePheGlnIleGlyTyrMet 240
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 684 CTACCTCTTCCCATCGACTACCAACAGGCTCTTGTGACGCTTCTTGAGTGTACATGAT 743

```

QY 240 eSerLeuIleAlaLeuPheThrAsnPhenTyrIleGlnThrTyrAsnLys 257
 Db 744 CACCTTGCTGCTCTCTTTCGGCAACTTTTGTGACAGGCTATCTTAAAAAG 795

Search completed: April 1, 2004, 10:47:57
 Job time : 82.9239 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Comphen Ltd.

OK protein - nucleic search, using frame_plus.p2n model

Run on: April 1, 2004, 08:28:07 ; Search time 77.0761 Seconds
(without alignments)
2102.410 Million cell updates/sec

Title: US-09-624-670-63
Perfect score: 1567
Sequence: 1 MEOLKAFDNEVNAFLDNMG.....NGFPXHLIVANGMTDKKXQ 292

Scoring table: BLOSUM62
Xgapop 10.0, Xgapext 0.5
Ygapop 10.0, Ygapext 0.5
Fgapop 6.0, Fgapext 7.0
Delop 6.0, Delext 7.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+ p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_SPOOL/US09624670/rnat 30032004 071120 14114/app query.fasta_1.910
-DB=Issued Patents NA -QPM=fastap -SUFIX=rni -MINMATCH=0.1 -IOBCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pct -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US09624670 @CGN 1 1 76 @rnat 30032004 071120 14114 -NCPQ=6 -ICPU=3
-NM MAP -LARGESUBSTRY -NEG SCORES=0 -WAIT -DEFLBLOCK=100 -LONGLOG
-DEV TIMEOUT=120 -MARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued Patents NA.*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq.*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq.*
3: /cgn2_6/ptodata/2/ina/5A_COMB.seq.*
4: /cgn2_6/ptodata/2/ina/5B_COMB.seq.*
5: /cgn2_6/ptodata/2/ina/PTUS_COMB.seq.*
6: /cgn2_6/ptodata/2/ina/backfillseq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	1567	100.0	879	Sequence 5, Appl
2	956.5	61.0	900	Sequence 6, Appl
3	941.5	60.1	914	Sequence 21, Appl
4	941.5	60.1	914	Sequence 3, Appl
5	462.5	29.5	1482	Sequence 258, App
6	462.5	29.5	1542	Sequence 106, App
7	449.5	28.7	1812	Sequence 430, App
8	403.5	25.7	819	Sequence 7, Appl
9	403.5	25.7	819	Sequence 72, Appl
10	401.5	25.6	819	Sequence 70, Appl
11	399.5	25.5	819	Sequence 73, Appl
12	397	25.3	957	Sequence 22, Appl

13	397	25.3	957	US-09-903-456-2	Sequence 2, Appl
14	396.5	25.3	818	US-09-903-456-71	Sequence 71, Appl
15	394.5	25.2	819	US-09-903-456-69	Sequence 69, Appl
16	393.5	25.1	819	US-09-903-456-74	Sequence 74, Appl
17	306	19.5	630	US-09-903-456-67	Sequence 67, Appl
18	292	18.6	1854	US-08-249-420-1	Sequence 1, Appl
19	292	18.6	1854	US-08-737-663-1	Sequence 1, Appl
20	279	17.8	954	US-09-145-828A-1	Sequence 1, Appl
21	279	17.8	954	US-09-621-978-12605	Sequence 1, Appl
22	245	15.6	377	US-09-145-828A-9	Sequence 9, Appl
23	235	15.0	587	US-09-903-456-16	Sequence 16, Appl
24	235	15.0	587	US-09-145-828A-10	Sequence 10, Appl
25	232	14.8	590	US-09-903-456-17	Sequence 17, Appl
26	232	14.8	590	US-09-903-456-4	Sequence 4, Appl
27	209	13.3	867	US-09-903-456-63	Sequence 63, Appl
28	200.5	12.8	798	US-07-985-970A-7	Sequence 7, Appl
29	193	12.3	989	US-08-298-687A-7	Sequence 7, Appl
30	193	12.3	989	US-08-530-797-6	Sequence 6, Appl
31	193	12.3	989	US-08-298-822-7	Sequence 7, Appl
32	193	12.3	989	US-08-787-335-6	Sequence 6, Appl
33	193	12.3	989	US-08-669-751-246	Sequence 259, App
34	150	9.6	546	US-09-149-476-259	Sequence 45, Appl
35	132	8.4	834	US-09-172-109-45	Sequence 775, App
36	121	7.7	124	US-08-417-330A-15	Sequence 15, Appl
37	111.5	7.1	3227	US-08-672-814D-1	Sequence 1, Appl
38	100	6.4	2310	US-09-383-696-1	Sequence 1, Appl
39	99.5	6.3	2051	US-09-282-218A-1	Sequence 13, Appl
40	99.5	6.3	2051	US-09-107-532A-1086	Sequence 1086, Ap
41	99.5	6.3	2103	US-09-328-352-1647	Sequence 1647, Ap
42	99.5	6.3	1416	US-08-592-126-90	Sequence 90, Appl
43	97.5	6.2	1659		
44	97.5	6.2	1834		
45	97.5	6.2	1834		

ALIGNMENTS

RESULT 1
US-09-903-456-5
Sequence No. 5, Application US/09903456
Patent No. 6677145
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407/US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 5
LENGTH: 879
TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-5

Alignment Scores:

Pred. No.: 1,27e-175
Score: 1567.00
Percent Similarity: 100.00%
Best Local Similarity: 100.00%
Query Match: 100.00%
Length: 879
Matches: 292
Conservative: 0
Mismatches: 0
Indels: 0
Gaps: 0
DB: 4

US-09-624-670-63 (1-292) x US-09-903-456-5 (1-879)

```

QY      1  M e g l u g l n l e u l y s a l a p h e a s p a n e n g l u v a l a n a l a p h e l e u a s p a n e m e t p h e g l y 20
DB      1  A T G G A G C A C T G A A G G C C T T T G A T A T A G A A G C A A T G C T T T C T T G A C A A C A T T T T G G A 60
QY      21  P r o A r g A s p S e r A r g V a l a r g l y T r p P h e l e u a s p S e r T y l e u P r o t h P h e l l e 40
DB      61  C C A C G A G A T T C T G A G T T C G C G G G T T C C T G C G A C C T T A C C T T C C A C C T T A T C 120
QY      41  L e u T h r l l e T h T y l e u l e u S e r l e t r p l e u g l y a n l y s t y m e l y s a n a r g p r o 60
DB      121  C T C A C C A T C A C G T A C T G C T C T C G A T A T G C G G G T T A C A A G T C A T G A A G A A C A G C C C T 180
QY      61  A l a l e u S e r l e u a r g l y l l e u T h r l e u T y r a n l e u a l a i e t h r l e u S e r A l a 80
DB      181  G C T C T G C T C A G G G G A T C C T C A C C T T G T A C C T C G A A C A C A C C T T C T T C T G C G 240
QY      81  T y r M e t l e u v a l g l u l e u l l e u S e r S e r T r p g l u g l y T y r a n l e u g l n C y e g l n 100
DB      241  T A T A T G C T G T G A G C T C A T C C T C C A G C T G G A A G A G G T T C A A C T T G C A G T G C A G 300
QY      101  A e n l e u a s p S e r A l a g l y g l u g l y a s p V a l a r g V a l a l y s v a l l e u T r p T r p T y r 120
DB      301  A A T C T G A C A G T G C A G A A G A G T A G T T C G G G T A G C A A G G T C T T G T G T G T A C T A C 360
QY      121  P r e S e r l y l e u v a l g l u p h e u a s p T h r l l e p h e v a l l e u a r g l y s l y s T h r a n 140
DB      361  T T C T C A A C T A G T G A G T T C C T G G A C A G A T T T C T T G T T C A C G A A A A A A C C A A T 420
QY      141  G l n l e T h r P h e l e u H i s V a l l y r h i s h i s a l a s e r M e t P h e a n l l e T r p C y e a l 160
DB      421  C A G A T A C C T C C T C A T G T C A T A C A C A C G C G T C A G T T C A C A C A T C T G T G T G T G T T 480
QY      161  L e u a n t r p l l e p r o C y e g l y g l n s e r P h e p h e g l y p r o T h r l e u a n s e r P h e l l e h i s 180
DB      481  T G A A C T G A T A C C T T G T G T G C A A G C T T T T G A C C C A C C C T G A A C A G T T A T C A C 540
QY      181  l l e l e u M e t T y r S e r T y r T y g l y l e u S e r V a l P h e P r o S e r M e t H i s l y s T y r l e u T r p 200
DB      541  A T T C T A T G T A C C C T A C T A C G C C T G T G T G T C C C G T C C A T G C A C A A T A C C T T T G G 600
QY      201  T r p l y l e u T y r l e u T h r G l n a g l n l e u v a l g l n P h e v a l l e u T h r l l e T h i s T h r 220
DB      601  T G S A A G A G T A C C T C A C A G G C T C A G C T G T G C A T T C G T A C C A T C A C C A C A C G 660
QY      221  l e u S e r A l a V a l y l y s p r o C y e g l y P h e P r o p h e g l y C y s l e u l l e p h e g l n s e r S e r 240
DB      661  C T G A G T G C G T G T G A A G C C T G T G G C T T C C C C T T G G C T G C A T C T T C A G A T C T T C C 720
QY      241  T y r M e t M e t T h r l e u v a l l l e l e u P h e l e u a n P h e T y r l l e g l n T h r T y r A r g l y l y s 260
DB      721  T A T A T A T A G A C G T G T C A T C C G T T T A A C C T T A T T C A G A C A T A C C G A A A A A G 780
QY      261  P r o V a l l y l e u g l n l e u g l n l u y s g l u v a l l y s a n g l y P h e P r o l y s a l a h i s l e u 280
DB      781  C C A G T A A G A A A G A G T G C A A G A A A A G A A G A A T G G T T T C C C A A A G C C A C T T A 840
QY      281  l l e v a l l a a n g l y m e t T h r a s p l y s l y s a l a g l n 292
DB      841  A T T G T G C T A A T G G A T G A C G A C A A G A G G C T C A A 876

```

RESULT 2

US-09-903-456-6
Sequence 6 Application US/09903456
Patent No. 6677145

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Sun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suresh L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

```

; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: fastseq for Windows Version 4.0
; SEQ ID NO: 6
; LENGTH: 900
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-903-456-6

Alignment Scores:
Pred. No.: 1,72e-103
Score: 956.50
Percent Similarity: 71.58%
Best Local Similarity: 58.95%
Query Match: 61.04%
DB: 4 Gaps: 1

US-09-624-670-63 (1-292) x US-09-903-456-6 (1-900)
QY      4  L e u y s a l a p h e a s p a n e n g l u v a l a n a l a p h e l e u a s p a n e m e t p h e g l y p r o A r g A s p 23
DB      1  A T G G A A C A T T C G A T G C G T C A C T C A G A C C A T T T C A A G C C T T C C G G C C C C G A G A T 60
QY      24  S e r A r g V a l a r g l y T r p P h e l e u a s p S e r T y l e u P r o t h P h e l l e u T h r l l e 43
DB      61  A C A A G A C T A A A G A A G A G T T C C T C C T G A A A T T A C A T C C C T A G T T G T G T T C T T G T T 120
QY      44  T h r T y l e u a n s e r l e t r p l e u g l y a n l y s t y m e l y s a n a r g p r o A l a l e u S e r 63
DB      121  A T T A C T A C T A T T G T A T G C T G G A C C A A A A T A C T A G A A A C C G C A G C C G T T C T C T 180
QY      64  L e u a r g l y l l e u T h r l e u T y r a n l e u a l l e T h r l e u a n s e r A l a T y r M e t l e u 83
DB      181  T G C C A G G C A T C C G A G T T G T A T A C C T T G A C T C A C C C T G C T C T C T C A T G T T C 240
QY      84  V a l g l u l e u l l e u S e r S e r T r p g l u g l y T y r a n l e u g l n C y s g l n a n l e u a s p 103
DB      241  T A T G A T T G T G A C A G G T G T G G A G G C A A T A C A C T T T T T C C A G G A A C A C G C 300
QY      104  S e r a l a g l y g l u g l y a s p V a l a r g V a l a l y s v a l l e u T r p T r p T y r P h e S e r l y s 123
DB      301  A G C G G G A G A A T C G A T A T A G A A T A C C G C G T C C T G T G T G T A C T T C T C A A A 360
QY      124  L e u v a l g l u p h e l e u a s p T h r l l e p h e v a l l e u a r g l y s l y s T h r a n g l n l e T h r 143
DB      361  C T C A T G A A T T C A T G A C A C T T T T C T A C C T T G C A A G A A C A A C A C C A G A T C A C C 420
QY      144  P h e l e u H i s V a l l y r h i s h i s a l a s e r M e t P h e a n l l e T r p C y s V a l l e u a n t r p 163
DB      421  G T G C T C A T G T C A C C A C A C G T A C A C A T G C T A A C A T C G T G T T G T G A T G A A C T G G 480
QY      164  l l e p r o C y e g l y g l n s e r P h e p h e g l y p r o T h r l e u a n s e r P h e l l e h i s l e u M e t 183
DB      481  G T T C C C T G C G C A T T A T T T G T G G C G A C A T C A A G C T T C A C C A T C C A G T G C C T C A T G 540
QY      184  T y r S e r T y r T y g l y l e u S e r V a l P h e P r o S e r M e t H i s l y s T y r l e u T r p T r p l y s l y s 203
DB      541  T A C T G T A C T A T G T G T C T C C A T C C C G C A T G C C C T A C C T C T G T G T G A A A A G 600
QY      204  T y r l e u T h r G l n a g l n l e u v a l g l n P h e v a l l e u T h r l l e T h r h i s T h r l e u S e r A l a 223
DB      601  T A C A T C A C T C A A G G C A G C T G T C A G T T G T G T G A A T C C A A T C C A G A G A C C T G C G G G 660
QY      224  V a l l y l y s p r o C y e g l y P h e P r o p h e g l y C y s l e u l l e p h e g l n s e r S e r T y r M e t 243
DB      841  A T T G T G C T A A T G G A T G A C G A C A A G A G G C T C A A 876

```


Db	1	ATGGAACATTTCATTCATCATCTTGTACCTATTTCAGAGCATTCGACCCCTCGAGAT	60
Qy	24	SetArgValArgIYrPheLeuLeuAspSerYrIleuProThrPheIleuThrIle	43
Db	61	ACTAGAGTAAAGAGAGGTTTCTTCCTGACAAATATATACCCACTTATTCGCTGTGC	120
Qy	44	ThrYrIleuLeuSerIlePheLeuIleAsnYrYrIleYrIleAsnArgProAlaLeuSer	63
Db	121	ATATATTACTATTGTATGCTGGGACCAAAATACATGAGAAATTAACAGCATTCCT	180
Qy	64	LeuArgGIYrIleuThrIleuYrIleuLeuAlaIleThrIleuSerAlaIArgYrIleu	83
Db	181	TGCCGGGGGATTTTACTGTATTAACCTTGACCTGACACACCTGCTGTCTGTATATGTTTC	240
Qy	84	ValGIuLeuIleuLeuSerSerThrIleuGIYrIleYrIleuLeuGlnYrIleuLeuAsp	103
Db	241	TGTAGATGTATTAACAGAGTATGGAAGCAAAATACAACTTCCTTGTCAGGGACACGC	300
Qy	104	SerAlaGIYrIleuYrIleuValArgValAlaIleValIleuTrpIYrYrPheSerIys	123
Db	301	ACCGAGGAGAAATCAATATGAAGATTAACGTCGTCCCTGGTGTATCTTCTCCAAA	360
Qy	124	LeuValGIuPheLeuAspThrIlePhePheValLeuArgYrIleYrIleuLeuGlnIleThr	143
Db	361	CTCATGTAAATTTATGACACATTTCTTCTTCATCTCTGGCAAGAACACACACAGATCAGC	420
Qy	144	PheLeuHISValYrIleHISAlaSerSerPheAsnIleTrpIYrPcyValLeuAsnTrp	163
Db	421	GTCCTGCACGTCAACACCATGCTCCGATGCTGAACATCTGGTGTGTTGTGATGAATCG	480
Qy	164	IleProCysGIYrIleuSerPhePheGIYrProThrIleuAsnSerPheIleHISIleLeuMet	183
Db	481	GTCCTCGGGGACCATCTTATTTGTGTCCACACTTAATAGCTTCATCCACGCTCTCAG	540
Qy	184	YrIleSerYrIleGIYrIleuSerValPheProSerMetHISYrIleuTrpIYrIleuTrpIYrIleu	203
Db	541	TACTCTTACTATGTGTGTGTGTCACGCTCCCTTCATGTCCTCAACCTCTGTGTGAAGAG	600
Qy	204	TyrIleuThrGIuAlaGlnIleuValGlnPheValIleuThrIleThrHISThrIleuSerAla	223
Db	601	TACATCACCAGGCGGACGCTGTTCAGTTTGCTGACATCATCCAGACGACGCGGG	660
Qy	224	ValValIleProCysGIYrPheProPheGIYrIleuIlePheGlnIleuSerYrIleuMet	243
Db	661	GTCATCTGGCGCGACATTCCTCTGTGTGTGTATTCAGATTCGATACATATAT	720
Qy	244	ThrIleuValIleuLeuPheLeuAsnPheYrIleGlnThrYrIleYrIleuYrIleuValYrIleu	263
Db	721	TCCCTGATGCTCTCTTCCAAACATCTTCACTTACAGACCTTCAACAGAAAGGCGCTCC	780
Qy	264	lysGIuLeuGlnGlnIleu---LysGIuValIleuAsnGIYrPheProIysAlaHISIleuIleVal	282
Db	781	CGAAGAAAGACCACTGAAAGACCAACAGATGGG-----TCCGTGCTGCT	828
Qy	283	AlaAsnGIYrIleuThrAsp	288
Db	829	GTCGATGACACACACAC	846
RESULT 5			
US-09-149-476-258			
Sequence 258, Application US/09149476			
Patent No. 6420526			
GENERAL INFORMATION:			
APPLICANT: Rosen et al.			
TITLE OF INVENTION: 186 Human Secreted proteins			
FILE REFERENCE: P2002P1			
CURRENT APPLICATION NUMBER: US/09/149,476			
CURRENT FILING DATE: 1998-09-08			
EARLIER APPLICATION NUMBER: PCT/US98/04493			
EARLIER FILING DATE: 1998-03-06			
EARLIER APPLICATION NUMBER: 60/040,162			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,338			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/036,621			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,626			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,334			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,336			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,163			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/047,600			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,633			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,615			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,597			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,502			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,617			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,618			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,503			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,592			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,581			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,584			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,500			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,587			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,492			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,598			
EARLIER FILING DATE: 1997-05-23			

```

EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,313
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,672
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,315
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/048,974
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/056,886
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,877
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,889
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,893
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,630
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,878
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,662
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,872
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,882
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,637
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,903
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,888
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,879
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,880
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,894
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,911
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,636
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,874
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,910
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,864
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,631
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,845
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,892
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,761
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/047,595
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,599
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,588
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,585
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,586
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,590
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,594
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,589
EARLIER FILING DATE: 1997-05-23

```

```

EARLIER APPLICATION NUMBER: 60/047,593
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,576
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/047,501
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,670
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/056,632
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,664
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,876
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,881
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,909
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,875
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,862
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,887
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,908
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/048,964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057,650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056,884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

```

Alignment Scores:

```

Pred. No.: 8,22e-45 Length: 1482
Score: 462.50 Matches: 102
Percent Similarity: 54.83% Conservative: 57
Best Local Similarity: 35.17% Mismatches: 118
Query Match: 29.51% Indels: 13
DB: 4 Gaps: 9

```

US-09-624-670-63 (1-292) X US-09-149-476-258 (1-1482)

```

Qy 2 GluGlnLeuLysAlaPheAspSerMetGlyPro 21
Db 79 GAGGCTTACCGAGTGAAGGCTGTGGAAGCTTACCAAGAGTGATC---AAGAC 135
Qy 22 ArgAspSerArgValArgGlyTrpPheLeuAspSer-----TyrLeuProThrPhe 39
Db 136 GCAGATCCCGGATCCAGGCTACCCCTCGATGGGGTCCCTTGCTAATGACCTCAATT 195
Qy 40 IleLeuThrIleThrTrpLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArg 59
Db 196 CTCTGACCTACGAGTGAAGCTTGT---CTTCACTGGGCTCGGATCTGAGCTAATCGG 252
Qy 60 ProAlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSer 79
Db 253 AAGCCCTTCAGCTCCGCTGCTTCAAGATGCTCAATTCCTCACTGGTGCACCTCC 312
Qy 80 AlaTyrMetLeuValGlnLeuLeuLeuSerSerTrpGlyGlyTyrAsnLeuGlnCys 99
Db 313 CTCTACATGTCTATGATGCTCGATGCGGCTGAGCACTAATACCTGAGGCTGT 372

```

Qy	100	GlAsnLeuAspSerValGlyValuLysP---ValArgValAlaValLeuPrrtp	118
Db	373	GAACCTGTGACATTCACAGCCCTTGAGCAGCATTTAGATGGTGGGTGGCTGCCTC	432
Qy	119	TyTrYPheSerIysLeuValGluPheLeuSpThrIlePhePheValLeuArgLysI	138
Db	433	TTCTCTCTTCTCCAAAGTTCAATTCATGCTGATGAGCAGCAGTGTACTTTTATCTCCGAAAGAA	492
Qy	139	ThraAsnGluIlePhePheLeuHisValTyrrHisIAsnSerPheAsnIlePrrtp	158
Db	493	GACGGGAGGTGACCTCTTACATGTCTTCATCATCTGTGCTCTCCGAGCTGGTGG	552
Qy	159	CysValLeuAsnIrrpIleProCysGlyGlnSerPhePheGlyProThrIleuAsnSerPhe	178
Db	553	TGGGGGGTAAAGATTGGCCCCGGGAGAGATGGCGCTTTCCATGCCATGATAAATCTTCC	612
Qy	179	IleHisIleLeuMetCysSerTyrrTyrrGlyLeuSerValPhe---ProSerMetHisLysI	197
Db	613	GTCACATCATATATGATACCTGTACTACCGATTAATCTCCCTTGGCCCTGTGGACACACC	672
Qy	198	TyLeuTrpTrpIysLeuTyrrLeuPheGlnIleGlnLeuValGlnPheValLeuThrIle	217
Db	673	TACCTTTGGTGGAAAAAGACATGACACCCATTAGCTGTATCCAGTTTGTCTGGTCTCA	732
Qy	218	ThraIse---ThrlseuSerAlaValIysProCysGlyPheProPheGlyCysLeuIle	236
Db	733	CTGCACATCTCCCAAGACTACTTATGTGCCAGCTGTACTACTACAGTACACAGTACATTAAT	792
Qy	237	PheGlnIse---SerTyrrMetMetThrlleuValIleLeuPheLeuAsnPheTyrrIleGln	255
Db	793	CACCTCATCTGATGTATGGCACCATTCTTTCATGCTGTCTTCCAACTTCGGTATCAC	852
Qy	256	ThrrTyrrArgLys---LysProValIysGlyGluLeuGlnIleuLysGluValIysAsnGly	274
Db	853	TTCTTATACCAAGGCAAGGCGCTGCGCCGTCGATTCAGCAA-----AATGGA	900
Qy	275	PheProIysAlaHisLeuIleValAlaAsn	284
Db	901	GCTCCAGGTATTTGCCAAGGTCAAGGCCAAC	930
RESULT 6			
US-09-149-476-106			
Sequence 106, Application US/09149476			
Patent No. 6420526			
GENERAL INFORMATION:			
APPLICANT: Rosen et al.			
TITLE OF INVENTION: 186 Human Secreted proteins			
FILE REFERENCE: P2002P1			
CURRENT APPLICATION NUMBER: US/09/149,476			
EARLIER FILING DATE: 1998-09-08			
EARLIER APPLICATION NUMBER: PCT/US98/04493			
EARLIER FILING DATE: 1998-03-06			
EARLIER APPLICATION NUMBER: 60/040,162			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,333			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/038,621			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,626			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,334			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,336			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/040,163			
EARLIER FILING DATE: 1997-03-07			
EARLIER APPLICATION NUMBER: 60/047,600			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,615			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,597			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,502			
EARLIER FILING DATE: 1997-05-22			
EARLIER APPLICATION NUMBER: 60/047,633			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,583			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,617			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,618			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,503			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,592			
EARLIER FILING DATE: 1997-05-23			
EARLIER APPLICATION NUMBER: 60/047,581			
EAR			

```

EARLIER APPLICATION NUMBER: 60/056, 878
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 662
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 872
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 882
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 637
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 903
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 888
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 879
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 880
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 894
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 911
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 636
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 874
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 910
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 864
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 631
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 845
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 892
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057, 761
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/047, 595
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 599
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 588
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 585
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 586
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 590
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 594
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 589
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 593
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047, 614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043, 578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043, 576
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/047, 501
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043, 670
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/056, 632
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 664
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 876
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 881

```

```

EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 909
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 875
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 862
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 887
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 908
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/048, 964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057, 650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056, 884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057, 669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049, 610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061, 060
EARLIER FILING DATE: 1997-10-02

```

Alignment Scores:

```

Pred. No.: 8,73e-45 Length: 1542
Score: 462.50 Matches: 102
Percent Similarity: 54.83% Conservative: 57
Best Local Similarity: 35.17% Mismatches: 118
Query Match: 29.51% Indels: 13
DB: 4 Gaps: 9

```

US-09-624-670-63 (1-292) x US-09-149-476-106 (1-1542)

```

QY 2 GluGlnLeuYsAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGlyPro 21
DB 107 GAGTCCTTACCCAGATGAGGCTGTTGAACTTATACCAAGAGTATG---AAGCAC 163
QY 22 ArgAspSerArgValArgGlyTyrPheLeuLeuAspSer-----TyrLeuProThrPhe 39
DB 164 GCAATGCCGAGGATCCAGGCTACCTCCGTGATGGGGTCCCTGCTATATGACCTCAT 223
QY 40 IleLeuThrIleThrTyrLeuLeuSerIleTyrPheGlyAsnIleTyrMetIleAsnArg 59
DB 224 CTCCTGACCTTACGTTGACTTCTGTT---CTTCACTGGGCTCGCTCATGCTATATCG 280
QY 60 ProIleLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSer 79
DB 281 AAGCCCTTCAGCTCCCTGCTGCTTCAATGCTTCAATCTTCACTGCTGACCTTCTCC 340
QY 80 AlaTyrMetLeuValGluLeuIleLeuSerSerTyrPheGlyGlyTyrAsnLeuGlnCys 99
DB 341 CTCCTTCTTCCAACTTATGATGCTTCTGATGCTGGGCTGCTGAGCACCTTATCTGGGCT 400
QY 100 GluAsnLeuAspSerIleArgIleGluIleAsp---ValArgValAlaIleValLeuTyrP 118
DB 401 GACCTTGTGACTTATTCACACAGCCTTACGACCTTATGATGCTGGCTGCTGCTC 460
QY 119 TyrTyrPheSerIleYsLeuValGluPheLeuAspThrIlePhePheValLeuArgIleYs 138
DB 461 TTCCTTCTTCCAACTTATGATGCTGATGAGGACACAGTATCTTATCTCCGAAAGAA 520
QY 139 ThrAsnGlnIleThrPheLeuHisValTyrHisAlaSerMetPheAsnIleTyrP 158
DB 521 GACGGGCAAGTGAACCTTCTTCACTTCTTCCACTCTGTGCTTCCCTGAGAGCTGGTGG 580
QY 159 CysValLeuAsnTyrIleProCysGlyGlnSerPheGlyProThrLeuAsnSerPhe 178
DB 581 TGGGGGTAAAGATGGCCCGGAGAGAAAGGGCTTTCATGACCATTAATACCTTCTCC 640
QY 179 IleHisIleLeuMetTyrSerTyrTyrGlyLeuSerValPhe---ProSerMetHisYs 197
DB 641 GTGATGTATTAATATGATACCTTACTACGAGATATATGCTTGGCCCTTGGCACACACC 700

```

Qy 198 TyrLeuTrpTrpLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIle 217
 Db 701 TACCTTGGTGAAGAAAGCATGACAGCATTCAGCTATCATCTTGTCTCTGCTCA 760
 Qy 218 ThrHis---ThrLeuSerAlaValValLysProCysGlyPheProPheGlyCysLeuIle 236
 Db 761 CTGACATCTCCAGACTACTTATGTCAGCTGTACTACAGACAGCCAGTCATTAAT 820
 Qy 237 PheGlnSer---SerTyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGln 255
 Db 821 CACCTCATCTGAGTATGTCACCATCTTCTCATCTCTTCTCCAACTTCGTGATAC 880
 Qy 256 ThrTyrArgLys---LysProValLysLysGluLeuGlnGluValLysGlnIle 274
 Db 881 TCTTATACCAAGGCAAGCGCGCTGCCCGGCACTTCAGCAA-----AATGA 928
 Qy 275 PheProLysAlaHisLeuIleValAlaAsn 284
 Db 929 GCTCAGGATATTGCCAAGGTCAAGGCCAAC 958

RESULT 7

US-09-023-655-430
 ; Sequence 430, Application US/09023655
 ; Patent No. 6607879

GENERAL INFORMATION:

APPLICANT: Cocks, Benjamin G.

APPLICANT: Susan G. Stuart

APPLICANT: Jeffrey J. Sellhammer

TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE

NUMBER OF SEQUENCES: 1508

CORRESPONDENCE ADDRESS:

ADDRESS: INCYTE PHARMACEUTICALS, INC.

STREET: 3174 PORTER DRIVE

CITY: PALO ALTO

STATE: CALIFORNIA

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/023,655

FILING DATE: HEREMITH

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Zeller, Karen J.

REGISTRATION NUMBER: 37,071

REFERENCE/DOCKET NUMBER: PA-0001 US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555

TELEFAX: (650) 845-4166

INFORMATION FOR SEQ ID NO: 430:

SEQUENCE CHARACTERISTICS:

LENGTH: 1812 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: URETTUT01

CLONE: 1658706

US-09-023-655-430

Alignment Scores:

Pred. No.: 3,82e-43 Length: 1812
 Score: 449.50 Matches: 102

Percent Similarity: 54.64%
 Best Local Similarity: 35.05%
 Query Match: 28.69%
 DB: 4 Gaps: 9

US-09-624-670-63 (1-292) x US-09-023-655-430 (1-1812)

Qy 2 GlnGlnLeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGlyPro 21
 Db 433 GAGCTCTTGCAGAGATGAGAGCTGTGTGTAACCTGTGTCACCAAGAGGTGAT---AAGCAC 489
 Qy 22 ArgAspSerArg-ValArgGlyTrpPheLeuLeuAspSer-----TyrLeuProThrPh 39
 Db 490 GCAAGATCCCGGATCCAGGGCTACCTGTATGGGGGCTCCCTGTGTAAGACCTCAT 549
 Qy 39 eIleLeuThrIleThrTyrLeuLeuSerIleTrpLeuValAsnIleTyrMetLysAsnAr 59
 Db 550 TCTCCGACCTACAGGTACTTGGT---CTCTCACTTGGGCTCGGCATCATGGCTATCG 606
 Qy 59 gProAlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeu 79
 Db 607 GAAGCCCTTCAGCTCCGGCTTCATATTGTCTACAACTTCACACTGAGGACCTCTC 666
 Qy 79 rAlaTyrMetLeuValGluLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCy 99
 Db 667 CCTTACATTTGCTCTAGACTTCTGATGTGGGCTGCTGACACCTTACTTGGCGCTG 726
 Qy 99 sGlnAsnLeuAspSerAlaGlyGluGlyAsp---ValArgValAlaLysValLeuTrpTr 118
 Db 727 TGACCTGTGACCTATTCACAGCCCTGAGGACCTTATGATGGTGGGCTGCTGCTG 786
 Qy 118 pTyrTyrPheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLys 138
 Db 787 CTTCCTCTTCCAGTTCATGATGACCTGATGACACATGATCTTATCTCCGAAAGAA 846
 Qy 138 sThrAsnGlnIleThrPheLeuHisValTyrHisIleAlaSerMetPheAsnIleTrpTr 158
 Db 847 AGACGGCAGAGTACCTTCTTACATGCTTTCATACCTGCTGCTCCCTGAGCTGTG 906
 Qy 158 pCysValLeuAsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPh 178
 Db 907 GTGGGGGTAAAGATTGCCCCGGAGAGATGGGCTTTCATGCAATGATAACTCTTC 966
 Qy 178 eIleHisIleLeuMetTyrSerTyrTyrGlyLeuSerValPhe---ProSerMetHisL 197
 Db 967 CGGCACTGCATATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1026
 Qy 197 sTyrLeuTrpTrpLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrI 217
 Db 1027 CTACCTTGTGGAAGAAAGCATGACAGCATTCAGCTGATTCAGATTGTCTGCTGCTC 1086
 Qy 217 eThrHis---ThrLeuSerAlaValValLysProCysGlyPheProPheGlyCysLeuI 236
 Db 1087 ACTGACATCTCCAGACTACTTATGTCAGCTGTACTACAGACAGTCCAGATCATTA 1146
 Qy 236 ePheGlnSer---SerTyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleG 255
 Db 1147 TCACTCATCTGAGTATGACACCATCTTCTCATGCTGTTCACCACTTCTGTATCA 1206
 Qy 255 nThrTyrArgLys---LysProValLysLysGluLeuGlnLysGluValLysAsnG 274
 Db 1207 CTCTTATACCAAGGCAAGCGGCTGCCCGGCACTTCAGCAA-----AATGA 1254
 Qy 274 yPheProLysAlaHisLeuIleValAlaAsn 284
 Db 1255 AGCTCAGGATATTGCCAAGGTCAAGGCCAAC 1285

RESULT 8

US-09-903-456-7
 ; Sequence 7, Application US/0903456
 ; Patent No. 6677145

GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories

/ APPLICANT: Mukerji, Pradip
 / APPLICANT: Leonard, Amanda Eun-Yeong
 / APPLICANT: Huang, Yung-Sheng
 / APPLICANT: Pereira, Suzete L.
 / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 / FILE REFERENCE: 6407 US P3
 / CURRENT APPLICATION NUMBER: US 09/903,456
 / CURRENT FILING DATE: 2001-07-11
 / PRIOR APPLICATION NUMBER: US 09/624,670
 / PRIOR FILING DATE: 2000-07-24
 / PRIOR APPLICATION NUMBER: US 09/379,095
 / PRIOR FILING DATE: 1999-08-23
 / PRIOR APPLICATION NUMBER: US 09/145,828
 / PRIOR FILING DATE: 1998-09-02
 / NUMBER OF SEQ ID NOS: 116
 / SOFTWARE: FASTSEQ for Windows Version 4.0
 / SEQ ID NO 7
 / LENGTH: 819
 / TYPE: DNA
 / ORGANISM: *Thraustochytrium aureum*
 / US-09-903-456-7

Alignment Scores:
 Pred. No.: 3,13e-38 Length: 819
 Score: 403.50 Matches: 91
 Percent Similarity: 52.96% Conservative: 52
 Best Local Similarity: 33.70% Mismatches: 100
 Query Match: 25.75% Indels: 27
 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-7 (1-819)

QY 16 AspaMethPheglYProAAspSerArgValArgLyrP----- 29
 Db 22 GATGATGTGGTGGCCCGCGTGAACCGCGCTGAGACAGTGGATGGCGCCCAAGCGG 81
 QY 30 PheUeuAaspSerYrLeuProThrPheUeuThr-----11e 43
 Db 82 TACGACCTCACCGATGGCGCTCCGATGATGAGCGTGCACACAGTGGATCGAGGTG 141
 QY 44 ThrYrLeuUeuSerLleTrrPleuGlyAsnLysYrMetLysAsn---ArgProAlaLeu 62
 Db 142 GGATACATGGCCATGCTCTCTTCGGCATCCCGATCCGATGAGACAGATGAGAAAGCCTTTT 201
 QY 63 SerLeuArgGlyLleUeuThrLeuYrAsnLleAlleThrLeuUeuSerAlaYrMet 82
 Db 202 GAGCTCAAGACCATCAAGCTCTTGCACAACTTGTCTTCGGACCTTCTTGTACATG 261
 QY 83 LeuValGluLeuUeuSerSerTrrPleuGlyYrAsnLeuGlnCysGlnAsnLeu 102
 Db 262 TGGGTGAGACCATCCGCGCATCTCTCGAGGCTTACAAAGTGTGGAAAGCATG 321
 QY 103 AspSerAlaGlyGluGlyAspValArg---ValAlaLysValLeuTrrPrrYrPhe 121
 Db 322 GAGAAAGGCAAGCATCTCATGCTCGAGGCGATGCTGCATCGTGCATCGTCTACGCG 381
 QY 122 SerYrLeuValGluPheUeuAspThrLlePhePheValLeuArgLysYrThrAsnGln 141
 Db 382 TCCAAAGCATACGAGTCTTGTGATACCGCATCATGATCTTTCACAAAGTTCACACG 441
 QY 142 IleThrPheUeuHsValYrHisHisAlaSerMetPheAsnLleTrrPrrYrPhe 161
 Db 442 GTTCTCTTGTGACGTGTACACCATCCGACATTTTGTGCATCTGTGGAGCTATCGCC 501
 QY 162 AsnTrrPlePrrCysGlyGlnSerPhePheglYrThrLeuUeuSerPheLleHis 181
 Db 502 AAGTACGCTCCAGAGGATGATGCGACTTTTCAGTATCTCACTCTTTCGACACAC 561
 QY 182 LeuMetYrSerYrTrrGlyLeuSer-----ValPheProSerMet 195
 Db 562 GTCATGTACGACTACTCTTCTTCTCCCAAGAGGTTGGGTTGTAAGCAATC--- 618
 QY 196 HsLysYrLeuTrrPrrLysYrLeuThrGlnAlaGlnLeuValGlnPheValLeu 215

Db 619 -----AAGCGTACATACACACCTTCAATGACCCAGTTCAAGCA 660
 QY 216 ThrLleThrHisThrLeuSerAlaValLysProCysGlyPheProPheGlyCysLeu 235
 Db 661 ATGCTTGTGAGCTGCTGTACGACTACCTCTTCCATGAGCATCCACAGAGCTCTGCG 720
 QY 236 IlePheGlnSerSerYrMetMetThrLeuValLleUeuPheUeuAsnPheYrLleGln 255
 Db 721 CAGCTCCTTGAGATGATACATGATCAGTCTTGTGCTTGTGCGCACTTTTGTGCG 780
 QY 256 ThrYrArgLysLysProValLysLysGlu 265
 Db 781 AGCTATCTTAAAGCCAAAGAGACAG 810

RESULT 9
 US-09-903-456-72
 / Sequence 72, Application US/09903456
 / Patent No. 6677145
 / GENERAL INFORMATION:

/ APPLICANT: Abbott Laboratories
 / APPLICANT: Mukerji, Pradip
 / APPLICANT: Leonard, Amanda Eun-Yeong
 / APPLICANT: Huang, Yung-Sheng
 / APPLICANT: Pereira, Suzete L.
 / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 / FILE REFERENCE: 6407 US P3
 / CURRENT APPLICATION NUMBER: US 09/903,456
 / CURRENT FILING DATE: 2001-07-11
 / PRIOR APPLICATION NUMBER: US 09/624,670
 / PRIOR FILING DATE: 2000-07-24
 / PRIOR APPLICATION NUMBER: US 09/379,095
 / PRIOR FILING DATE: 1999-08-23
 / PRIOR APPLICATION NUMBER: US 09/145,828
 / PRIOR FILING DATE: 1998-09-02
 / NUMBER OF SEQ ID NOS: 116
 / SOFTWARE: FASTSEQ for Windows Version 4.0
 / SEQ ID NO 72
 / LENGTH: 819
 / TYPE: DNA
 / ORGANISM: *Thraustochytrium aureum*
 / US-09-903-456-72

Alignment Scores:
 Pred. No.: 3,13e-38 Length: 819
 Score: 403.50 Matches: 91
 Percent Similarity: 52.96% Conservative: 52
 Best Local Similarity: 33.70% Mismatches: 100
 Query Match: 25.75% Indels: 27
 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-72 (1-819)

QY 16 AspaMethPheglYProAAspSerArgValArgLyrP----- 29
 Db 22 GATGATGTGGTGGCCCGCGTGAACCGCGCTGAGACAGTGGATGGCGCCCAAGCGG 81
 QY 30 PheUeuAaspSerYrLeuProThrPheUeuThr-----11e 43
 Db 82 TACGACCTCACCGATGGCGCTCCGATGATGAGCGTGCACACATGCTGGCATTCGAGGTG 141
 QY 44 ThrYrLeuUeuSerLleTrrPleuGlyAsnLysYrMetLysAsn---ArgProAlaLeu 62
 Db 142 GGATACATGGCCATGCTCTCTTCGGCATCCCGATCCGATGAGACAGATGAGAAAGCCTTTT 201
 QY 63 SerLeuArgGlyLleUeuThrLeuYrAsnLleAlleThrLeuUeuSerAlaYrMet 82
 Db 202 GAGCTCAAGACCATCAAGCTCTTGCACAACTTGTCTTCGGACCTTCTTGTACATG 261
 QY 83 LeuValGluLeuUeuSerSerTrrPleuGlyYrAsnLeuGlnCysGlnAsnLeu 102
 Db 262 TGGGTGAGACCATCCCGCGCATCTCTCGAGGCTTACAAAGTGTGGAAAGCATG 321

Qy 103 AspSerAlaGlyIleuGlyAspValArg---ValAlaIleValIleuTrpTrpTyrPhe 121
 Db 322 GAGAGGCAACGAGTCTCATGCTCAGGGCATCTCCGATGATGACGTTCATCACTG 381
 Qy 122 SerIleuValGluPheLeuAspThrIlePhePheValIleuArgIleuThrAsnGln 141
 Db 382 TCAGAGCATACGAGTCTTGATACCGCATCATGATCTTGGACAGAAAGTTCACACG 441
 Qy 142 IleThrPheLeuHisValIleThrHisAlaSerMetPheAsnIleTrpTrpCysValIleu 161
 Db 442 GTTTCCTTGTGATGTGTACACCATGACCGATTTTTCATCTGTGTGGGCTTTCGCC 501
 Qy 162 AsnTrpIleProCysGlyIleuSerPhePheGlyProThrIleuAsnSerPheIleHisIle 181
 Db 502 AAGTACGCTCCAGAGATGATGGTACTTTTCAGTATCTCAACTCTTTCGTGACAC 561
 Qy 182 LeuMetIleuValGluIleuSerPhePhePhePhePhePhePhePhePhePhePhe 195
 Db 562 GTCATGTACGATCACTACTCTTCTCTCCCAAGGATGCGGTTCCGTGAGCCAAATC--- 618
 Qy 196 HisIleuValIleuTrpIleuValIleuValIleuValIleuValIleuValIleu 215
 Db 619 -----AAGCGTACATACACACCTTCAGATGACCCAGTTTCATGCA 660
 Qy 216 ThrIleThrHisThrIleuSerAlaValIleuProCysGlyPheProPheGlyCysIleu 235
 Db 661 ATGCTGTGACAGTCTTGTGACAGTACTCTTCCCATGACACCAAGGCTCTTGTG 720
 Qy 236 IlePheGlnSerIleuMetMetThrIleuValIleuPheLeuAsnIleuValIleu 255
 Db 721 CAGCTTCTTGAGATGTACATGATACCTTGTGCTTCCCTTCCGCAACTTTTGTGAC 780
 Qy 256 ThrIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleu 265
 Db 781 AGCTATCTTAATAAGCCAAAGAGAGAGAG 810

RESULT 10

US-09-903-456-70
 ; Sequence 70, Application US/09903456
 ; Patent No. 6677145

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Leonard, Amanda Eun-Yeong
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 FILE REFERENCE: 6407 US P3
 CURRENT APPLICATION NUMBER: US/09/903,456
 CURRENT FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24
 PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO 70
 LENGTH: 819
 TYPE: DNA
 ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-70

Alignment Scores:

Pred. No.: 5.39e-38 Length: 819
 Score: 401.50 Matches: 92
 Percent Similarity: 52.38% Conservative: 51
 Best Local Similarity: 33.70% Mismatches: 97
 Query Match: 25.62% Indels: 33
 DB: 4 Gaps: 7

US-09-624-670-63 (1-292) x US-09-903-456-70 (1-819)

Qy 16 AspAsnMetPheGlyProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyr 35
 Db 22 GATGATGTGTGGGCGCGCTGGAGACCGGCGGTGACCACTG3-----ATGATGGCGCC 75
 Qy 36 LeuProThrPheIleuThr----- 42
 Db 76 AAGCCG---TAGCACTACCGATGGGCCCGCATGATGACGTGTCCACCATGCTGGCA 132
 Qy 43 -----IleThrTyrIleuSerIleTrpIleuGlyAsnIleuValIleuValIleuValIleu 59
 Db 133 TTGAGGTGATATCATGTCATGCTGCTTGTGATCCGATCATGATCAAGCAATGAG 192
 Qy 60 ProAlaIleuSerIleuValIleuValIleuValIleuValIleuValIleuValIleu 79
 Db 193 AAGCTTTGAGCTCAAGACATCAAGCTTGTGCAACTGTGTCTTGTGCACTTCC 252
 Qy 80 AlaTyrMetIleuValGluIleuIleuSerSerTrpGlyIleuValIleuValIleuValIleu 99
 Db 253 TTGTACATGTGCTGGAGACCATCCGACGCTATCTCGAGGCTTACAAAGTGTGGA 312
 Qy 100 GluAsnLeuAspSerAlaGlyIleuValIleuValIleuValIleuValIleuValIleu 118
 Db 313 AACGACATGAGAGAGGCAACAGTCTCATGCTCAGGGCATGTCTCGCATGCTGACCG 372
 Qy 119 TyrTyrPheSerIleuValGluPheLeuAspThrIlePhePheValIleuArgIleuVal 138
 Db 373 TTCTAGGTGTCCAGGACATACAGATCTTGTGATACCGCATCATGATCTTGTGCAAGAG 432
 Qy 139 ThrAsnGlnIleThrPheLeuHisValIleThrHisAlaSerMetPheAsnIleTrpTrp 158
 Db 433 TTCACACAGGTTCTCTTGTGATGTACACCATGACCATGACCATGTTTGCATCTGTGG 492
 Qy 159 CysValIleuAsnTrpIleProCysGlyIleuSerPhePheGlyProThrIleuAsnSerPhe 178
 Db 493 GCTATGCCAAGTACGCCCCAGAGATGATGCTTTCAGTATCTCAACTCTTTC 552
 Qy 179 IleHisIleuMetIleuSerIleuValIleuValIleuValIleuValIleuValIleu 192
 Db 553 GTGACACCGTCAATGACCATCACTACTTCTCTCCCAAGGTTGGGCTTGTGAG 612
 Qy 193 ProSerMetHisIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleu 212
 Db 613 CCATC-----AAGCGTACATACACACCTTCAGATGACCGAG 651
 Qy 213 PheValIleuThrIleThrHisThrIleuSerAlaValIleuProCysGlyPheProPhe 232
 Db 652 TTGATGCAATGCTTGTGACATCTTGTGACATCTTCTCCATGCGACTACCCACAG 711
 Qy 233 GlyCysIleuIlePheIleuSerIleuMetMetThrIleuValIleuPheLeuAsnPhe 252
 Db 712 GCTCTTGTGAGCTTCTTGGAGTGTACATGATCACTTGTGCTTGTGCTTGTGCACTTT 771
 Qy 253 TyrIleGlnThrTyrArgIleuValIleuValIleuValIleuValIleuValIleuValIleu 265
 Db 772 TTGTGTGACGATCTTAATAAGCCAAAGAGAGAGAG 810

RESULT 11

US-09-903-456-73
 ; Sequence 73, Application US/09903456
 ; Patent No. 6677145

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Leonard, Amanda Eun-Yeong
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 FILE REFERENCE: 6407 US P3
 CURRENT APPLICATION NUMBER: US/09/903,456
 CURRENT FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO 73
 LENGTH: 819
 TYPE: DNA
 ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-73

Alignment Scores:
 Pred. No.: 9-296-38 Length: 819
 Score: 399.50 Matches: 92
 Percent Similarity: 52.43% Conservative: 48
 Best Local Similarity: 34.46% Mismatches: 99
 Query Match: 25.49% Indels: 28
 DB: Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-73 (1-819)

```

QY 20 G1YPRoAaGpSeraArg-ValArgGlyTrp-----PheLeuLeuS 33
   |||||
DB 33 GGGCCGCGTGGAGACCGGCGTGGACCAAGTGGATGGCGCCAGCCGACCTCAC 92
   |||||
QY 33 pSerTrLeuProThrPheLeuLeuThr-----IleThrTrLeuLe 47
   |||||
DB 93 CGATGGGCTCCCGATGATGATGACGATGTCACCATGCTGCTGGAGTGGATGAC 152
   |||||
QY 47 useR1eTrpLeuGlyAsnLysTrpMetLysAsn--ArgProAlaLeuSerLeuArg1 66
   |||||
DB 153 CATGCTGCTTCGGCATCCGATCATGAGACATGAGACATGAGACCTTTAGCTCAAGAC 212
   |||||
QY 66 Y1LeuThrLeuTrpAsnLeuAlaIleThrLeuLeuSerAlaTrpMetLeuValGluLe 86
   |||||
DB 213 CATCAAGCTCTTGACCAACTGTTCTTCTTGGACCTTCTTGACATGTCGTGGAGAC 272
   |||||
QY 86 u1LeuSerSerTrpGluGlyGlyTrpAsnLeuGlnCysGlnAsnLeuAspSera1aG1 106
   |||||
DB 273 CATCCGCGAGGCTATCCCTCGAGAGCTCAAAAGTTTGGAAACAGATGGAGAGGCA 332
   |||||
QY 106 YGluGlyAspValArg--ValAlaLysValLeuTrpTrpTyTrpPheSerLysLeuVa 125
   |||||
DB 333 CGAGTCTCATGCTGACGAGGATGCTCCGATCGTGTAGCTGTCTACGTGTCACAGCAT 392
   |||||
QY 125 lGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThrPheLe 145
   |||||
DB 393 CGAGTCTTGATACCGCATCATGATCATCTTTGCAAGAAGTTCAACAGGTTCTCTTT 452
   |||||
QY 145 uH1eValTrpHisAlaSerMetPheAsnIleTrpTrpCysValLeuAsnTrp1LePr 165
   |||||
DB 453 GCATCGTACACCATGACCATGTCATTTTGGCATGTGGTGGGATGCGCAAGACCTCC 512
   |||||
QY 165 oCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis1LeuMetLysLe 185
   |||||
DB 513 AGGAGGTATGCGTACTTTCAGTATCTCACTCTTGTGACACCGCTCATGTAAGCC 572
   |||||
QY 185 rTyTrpGlyLeuSer-----ValPheProSerMetHisLysTrpLe 199
   |||||
DB 573 ATACTACTTCTTCTCTCCCAAGGTTCCGGTTCGTGAAGCCATC----- 618
   |||||
QY 199 uTrpTrpLysLysTrpLeuTrpGlnAlaGlnLeuValGlnPheValLeuThrIleThrI 219
   |||||
DB 619 -----AAGCCGATACACACACCTTCAGATATACCAAGTTTCAAGCAATGCTTGA 671
   |||||
QY 219 sThrLeuSera1aValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSe 239
   |||||
DB 672 GTCTCTTGACATCACTCTTCCCATGAGATGACATCCACAGCTCTTGTGAGCTTTGG 731
   |||||
QY 239 rSerTrpMetMetThrLeuValIleLeuPheLeuAsnPheTrpIleGlnThrTrpArgly 259
   |||||
DB 732 AGTGTACATGATCACTCTTGTGACCTCTTGTGACACTTTTGTGTGAGAGCTATCTTAA 791

```

QY 259 sIysProValLysLysGln 265
 DB 792 AAGCCAAAAAGGCGAG 810

RESULT 12
 US-09-769-863-22
 Sequence 22, Application US/09769863
 Parent No. 6635451
 GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Das, Tapas
 APPLICANT: Thurmond, Jennifer
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
 FILE REFERENCE: 6763-US-01
 CURRENT APPLICATION NUMBER: US/09/769,863
 CURRENT FILING DATE: 2001-01-25
 NUMBER OF SEQ ID NOS: 32
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO 22
 LENGTH: 957
 TYPE: DNA
 ORGANISM: *Moellerella alpha*
 US-09-769-863-22

Alignment Scores:
 Pred. No.: 2,326-37 Length: 957
 Score: 397.00 Matches: 92
 Percent Similarity: 51.04% Conservative: 55
 Best Local Similarity: 31.94% Mismatches: 95
 Query Match: 25.34% Indels: 47
 DB: Gaps: 7

US-09-624-670-63 (1-292) x US-09-769-863-22 (1-957)

```

QY 20 G1YPRoAaGpSeraArg-ValArgGlyTrpPheLeuLeuAspSerTr 35
   |||||
DB 80 GGGCCGCGCTATGTCATCTCTCGAGGCGCGCTGTGGCC-CAGCCGAGAAAGT 138
   |||||
QY 36 LeuProThrPheLe----- 40
   |||||
DB 139 ATCCCAAGATTTGTCATCACACGCGTGGTTCGTGCGGTGAGTCCCTTGGCC 198
   |||||
QY 41 -----LeuThrIleThrTrpLeuLeu 47
   |||||
DB 199 CGTACGCTGCCGTGATGAACCGCTTCAAGTGTCTGTATGATGTCTCATATTGTC 258
   |||||
QY 48 Ser1eTrpLeuGlyAsnLysTrpMetLysAsnArgProAlaLeuSerLeuArgLys1 67
   |||||
DB 259 ACGTCTTGTGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 318
   |||||
QY 68 LeuThrLeuTrpAsnLeuAlaIleThrLeuLeuSerAlaTrpMetLeuValGluLeu 87
   |||||
DB 319 TCGCTCTGACCAACTTCTTCTGCTGATAGCGCTTACATGTCGCGGTGATCCG 378
   |||||
QY 88 LeuSerSerTrpGluGlyTrpAsnLeuGlnCysGlnAsnLeuAspSera1aGlyGlu 107
   |||||
DB 379 TACAGAGCTTATCAGGCACTATGATGATGATGATGATGATGATGATGATGATG 438
   |||||
QY 108 G1YAspValArgValAlaLysValLeuTrpTrpTyTrpPheSerLysLeuValGluPhe 127
   |||||
DB 439 GGT--CTTCTTATGCGAAGATGATGATGATGATGATGATGATGATGATGATGAT 495
   |||||
QY 128 LeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThrPheLeuHisVal 147
   |||||
DB 496 GTCCACCATGATCATGATGCTCTCAAGAAACACCGCATGCTCTTCTTGGACGTT 555
   |||||
QY 148 TyrHisHisAlaSerMetPheAsnIleTrpTrpCysValLeuAsnTrp1LeProCysGly 167
   |||||
DB 556 TACACCAAGCTTCATCTTCAACATCTGATGATGATGATGATGATGATGATGATGAT 615

```


LENGTH: 819
 TYPE: DNA
 ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-71

Alignment Scores:

Pred. No.: 2,1e-37 Length: 819
 Score: 396.50 Matches: 90
 Percent Similarity: 52.59% Conservative: 52
 Best Local Similarity: 33.33% Mismatches: 101
 Query Match: 25.30% Indels: 27
 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-71 (1-819)

```

Qy 16 AspAmePheGlyProAArgSerArgValArgGlyTP----- 29
Db 21 GATGATGTGTGGCCCGCGGAGACCGAGTGGACCACTGATGATGAGCGCCAGCG 80
Qy 30 PheLeuAsePseTyrLeuProThrPheLeuThr-----1le 43
Db 81 TAGCACTACCGATGGCTCCCGATGATGACGTGTCCACATGCTGGCATTCAGGTG 140
Qy 44 ThrTyrLeuAseSerIleTyrLeuGlyAsnLysTyrMetLysAsn---ArgProAlaLeu 62
Db 141 GGATACATGACCATGCTGCTCTTCGGCATCCCGATCATGACAGATGAGAGAGCTTTT 200
Qy 63 SerLeuArgGlyLeuLeuThrLeuTyrAsnLeuAlaIleThrLeuAseSerIleTyrMet 82
Db 201 GAGCTCAAGACCATCAAGCTCTTGCACAACTGTCTTCTGGACTTCTTGTACATG 260
Qy 83 LeuValGluLeuIleLeuAseSerTyrGluGlyTyrAsnLeuGlnCysGlnAsnLeu 102
Db 261 TGGGTGAGACCATCCCGCATCCCGAGGCTCAAAAGTGTGGAAACACATG 320
Qy 103 AspSerAlaGlyGluGlyAspValArg---ValAlaLysValLeuTyrTyrPhe 121
Db 321 GAGAGAGGACACAGCTCATGCTCCAGGAGATGTCGATGATGACGTGTCTACATG 380
Qy 122 SerLysLeuValGluPheLeuAsePThrIlePhePheValLeuArgLysThrAsnGln 141
Db 381 TCCAAGCATACAGATCTTGTGATACCGCATATATATCTTTCGACAGAGTTCAACG 440
Qy 142 IleThrPheLeuHisValTyrHisSalAspMetPheAsnIleTyrTyrCysValLeu 161
Db 441 GTTCCCTTGTGACAGGTATGACCAACATGTCATTTTGCATCGGCGGTATGCC 500
Qy 162 AsnTyrIleProCysGlyGlnSerPhePheGlyProThrLeuAseSerPheIleHisIle 181
Db 501 AAGTACGCTCCAGAGGTATGATGCTTTTCAGTATCCTCACTCTTCGTGACACC 560
Qy 182 LeuMetTyrSerTyrTyrGlyLeuSer-----ValPheProSerMet 195
Db 561 GTCATGTACGATCTCTCTCTCTCCCAAGGGTGGGTGCTGTGAAGCAATC--- 617
Qy 196 HisLysTyrLeuTyrPheLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeu 215
Db 618 -----AAGCGGTATCATCCACACCTTCAGATGACCCAGTTCAATGCA 659
Qy 216 ThrIleThrHisThrLeuAseSerAlaValIleProCysGlyPheProPheGlySerLeu 235
Db 660 ATGCTGTGACAGTCTGTGACAGTACCTCTTCCATGACAGTACCAAGAGCTGTG 719
Qy 236 IlePheGlnSerSerTyrMetMetThrLeuValIleLeuPheLeuAsePheTyrIleGln 255
Db 720 CAGCTTCTTGAGGTATGATGATCATCTGCTGCTCTTGGCAACTTTTGTGAG 779
Qy 256 ThrTyrArgLysLysProValLysLysGlu 265
Db 780 AGCTATCTTAAAGCCAAAGAGAGAG 809

```

RESULT 15
 US-09-903-456-69

```

; Sequence 69, Application US/09903456
; Patent No. 6577145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407/US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
; US-09-903-456-69

Alignment Scores:
Pred. No.: 3.62e-37 Length: 819
Score: 394.50 Matches: 90
Percent Similarity: 52.59% Conservative: 52
Best Local Similarity: 33.33% Mismatches: 101
Query Match: 25.18% Indels: 27
Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-69 (1-819)
Qy 16 AspAmePheGlyProAArgSerArgValArgGlyTP----- 29
Db 22 GATGATGTGTGGCCCGCGGAGACCGCGGAGACCGATGATGATGAGCGCCAGCG 81
Qy 30 PheLeuAsePseTyrLeuProThrPheLeuThr-----1le 43
Db 82 TAGCACTACCGATGGCTCCCGATGATGACGTGTCCACATGCTGGCATTCAGGTG 141
Qy 44 ThrTyrLeuAseSerIleTyrLeuGlyAsnLysTyrMetLysAsn---ArgProAlaLeu 62
Db 142 GGATACATGACCATGCTGCTCTTCGGCATCCCGATCATGACAGATGAGAGAGCTTTT 201
Qy 63 SerLeuArgGlyTyrLeuThrLeuTyrAsnLeuAlaIleThrLeuAseSerAlaTyrMet 82
Db 202 GAGCTCAAGACCATCAAGCTCTTGCACAACTGTCTTCCGACCTTCTGTGATG 261
Qy 83 LeuValGluLeuIleLeuAseSerTyrGluGlyTyrAsnLeuGlnCysGlnAsnLeu 102
Db 262 TGGGTGAGACCATCCCGCATCCCGAGGCTCAAAAGTGTGGAAACACATG 321
Qy 103 AspSerAlaGlyGluGlyAspValArg---ValAlaLysValLeuTyrTyrPhe 121
Db 322 GAGAGAGGACACAGCTCATGCTCCAGGACAGTGTCCATGATGATGATGCTGCTG 381
Qy 122 SerLysLeuValGluPheLeuAsePThrIlePhePheValLeuArgLysThrAsnGln 141
Db 382 TCCAAGCATACAGATCTTGTGATACCGCATATATATCTTTCGACAGAGTTCAACG 441
Qy 142 IleThrPheLeuHisValTyrHisSalAspMetPheAsnIleTyrTyrCysValLeu 161
Db 442 GTTCCCTTGTGACAGGTATGACCAACATGTCATTTTGCATCGGCGGTATGCC 501
Qy 162 AsnTyrIleProCysGlyGlnSerPhePheGlyProThrLeuAseSerPheIleHisIle 181
Db 502 AAGTACGCTCCAGAGGTATGATGCTTTTCAGTATCCTCACTCTTCGTGACACC 561
Qy 182 LeuMetTyrSerTyrTyrGlyLeuSer-----ValPheProSerMet 195

```

```
Db      562 GTGATGTACGCACTACTCTCTCTCCCTCCCAAGGTTGGGTTGCTGTAAGCCATC--- 618
QY      196 HSLysTYrLeuTYrDTPlySLysTYrLeuThrglnAginLeuValGlnPheValLeu 215
Db      619 -----AAGCGTACATCACCACTTCAGATGACCCAGTTCAATGCA 660
QY      216 ThrIleThrHisThrLeuSerAlaValAllylProCysGlyPheProPheGlyCysLeu 235
Db      661 ATGCTTGTGACAGTCTTGTAGGACTACTCTTCCCATGCGACTACCAAGGCTTGTG 720
QY      236 IlePheGlnSerSerTYrMetMetThrLeuValIleLeuPheLeuAsnPheTYrIleGln 255
Db      721 CAGCTTCTTGAGTGTACATGATCACTTGCTGCGCTCTCGGCAACTTTTGTGTCAG 780
QY      256 ThrTYrArgLYsLeuProVallylPheGlu 265
Db      781 AGCTATCTTAAAGCCAAAAGAGCAAG 810
```

Search completed: April 1, 2004, 10:47:53
Job time : 82.0761 Secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - nucleic search, using frame_plus_pn model

Run on: April 1, 2004, 10:32:28 ; Search time 388.345 Seconds
(without alignments)
2811.926 Million cell updates/sec

Title: US-09-624-670-63

Perfect score: 1567
Sequence: 1 MEOLKAFDNEVNAFLDNNMFC.....NGEPKALIVANGMTCKKQ 292

Scoring table:
BLOSUM62
Xgapop 10.0, Xgapext 0.5
Ygapop 10.0, Ygapext 0.5
Fgapop 6.0, Fgapext 7.0
Delop 6.0, Delext 7.0

Searched: 2465228 seqs, 1869859620 residues

Total number of hits satisfying chosen parameters: 4930456

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODE=frame+pn_model -DEV=xlh
-Q=/cgn2_1/USPTO.spool/US09624670/runat_30032004_071121_14140/app_query.fasta_1.910
-DB=Published Applications NA -QWMT=fastap -SUFFIX=rmpb -WINMATCH=0.1
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blonsum62
-TRANS=human4.cdi -LIST=45 -DOCLIGN=500 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODS=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZ=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09624670@cgn2_1.271@runat_30032004_071121_14140
-NCPU=6 -ICPU=3 -NO_WMAP -LARGEQUERY -NEG_SCORES=0 -WALT -DSEBLOCK=100
-LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-Fgapop=6 -Fgapext=7 -YGAPOP=10 -YGAPEXT=0.5 -DELop=6 -DELext=7

Database: Published Applications NA:

1: /cgn2_6/prodata/2/pubna/US07_PUBCOMB.seq:*
2: /cgn2_6/prodata/2/pubna/PCT_NEW_PUB.seq:*
3: /cgn2_6/prodata/2/pubna/US06_NEW_PUB.seq:*
4: /cgn2_6/prodata/2/pubna/US06_PUBCOMB.seq:*
5: /cgn2_6/prodata/2/pubna/US07_NEW_PUB.seq:*
6: /cgn2_6/prodata/2/pubna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/prodata/2/pubna/US08_NEW_PUB.seq:*
8: /cgn2_6/prodata/2/pubna/US08_PUBCOMB.seq:*
9: /cgn2_6/prodata/2/pubna/US09_PUBCOMB.seq:*
10: /cgn2_6/prodata/2/pubna/US09_PUBCOMB.seq:*
11: /cgn2_6/prodata/2/pubna/US09C_PUBCOMB.seq:*
12: /cgn2_6/prodata/2/pubna/US10_NEW_PUB.seq:*
13: /cgn2_6/prodata/2/pubna/US10A_PUBCOMB.seq:*
14: /cgn2_6/prodata/2/pubna/US10B_PUBCOMB.seq:*
15: /cgn2_6/prodata/2/pubna/US10C_PUBCOMB.seq:*
16: /cgn2_6/prodata/2/pubna/US10_NEW_PUB.seq:*
17: /cgn2_6/prodata/2/pubna/US60_NEW_PUB.seq:*
18: /cgn2_6/prodata/2/pubna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysts of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
------------	-------	-------------	--------	----	-------------

Result No.	Score	Query Match	Length	ID	Description
1	1567	100.0	879	9	US-09-903-456-5
2	1567	100.0	879	10	US-09-849-129A-22
3	1567	100.0	879	14	US-10-120-637A-22
4	1567	100.0	879	14	US-10-156-911-5
5	1431	91.3	2426	14	US-10-198-846-13406
6	1430	91.3	2340	12	US-10-058-270A-91
7	1430	91.3	2340	12	US-10-342-887-1707
8	956.5	61.0	900	9	US-09-903-456-6
9	956.5	61.0	900	14	US-10-156-911-6
10	941.5	60.1	914	9	US-09-903-456-3
11	941.5	60.1	914	10	US-09-769-863-21
12	941.5	60.1	914	14	US-10-156-911-3
13	941.5	60.1	914	14	US-10-054-534B-21
14	941.5	60.1	914	14	US-10-408-736-3
15	941.5	60.1	914	14	US-10-431-955-21
16	921	58.8	1997	15	US-10-264-237-936
17	749	47.8	748	9	US-09-764-868-352
18	679	43.3	1203	12	US-10-112-944-217
19	679	43.3	2219	15	US-10-094-749-317
20	670.5	42.8	871	9	US-09-764-868-353
21	508.5	32.5	3670	14	US-10-305-823-125
22	462.5	29.5	1472	14	US-10-024-298A-28
23	462.5	29.5	1472	14	US-10-042-211A-28
24	462.5	29.5	1482	10	US-09-809-391-258
25	462.5	29.5	1482	10	US-09-882-171-258
26	462.5	29.5	1542	10	US-09-809-391-106
27	462.5	29.5	1542	10	US-09-882-171-106
28	453	28.9	1011	15	US-10-264-237-1068
29	420.5	26.8	1682	9	US-09-822-830A-345
30	403.5	25.7	819	9	US-09-903-456-7
31	403.5	25.7	819	9	US-09-903-456-72
32	403.5	25.7	819	14	US-10-156-911-7
33	403.5	25.7	819	14	US-10-156-911-72
34	401.5	25.6	819	9	US-09-903-456-70
35	401.5	25.6	819	14	US-10-156-911-70
36	399.5	25.5	819	9	US-09-903-456-73
37	399.5	25.5	819	9	US-10-156-911-73
38	397.5	25.4	2225	9	US-09-925-401-48
39	397	25.3	957	9	US-09-903-456-2
40	397	25.3	957	10	US-09-769-863-22
41	397	25.3	957	14	US-10-156-911-2
42	397	25.3	957	14	US-10-054-534B-22
43	397	25.3	957	14	US-10-408-736-2
44	397	25.3	957	14	US-10-431-952-22
45	396.5	25.3	818	9	US-09-903-456-71

ALIGNMENTS

RESULT 1
US-09-903-456-5
Sequence 5, Application US/09903456
Patent No. US20020138874A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407.US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 879

```

; TYPE: DNA
; ORGANISM: Mus musculus
US-09-624-670-63 (1-292) x US-09-624-670-63 (1-879)

Alignment Scores:
Pred. No.: 6,02e-168 Length: 879
Score: 1567.00 Matches: 292
Percent Similarity: 100.00% Mismatches: 0
Best Local Similarity: 100.00% Indels: 0
Query Match: 100.00% Gaps: 0

US-09-624-670-63 (1-292) x US-09-624-670-63 (1-879)

QY 1 MetGlnLeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGly 20
DB 1 ATGGAGCAGCTGAAGGCTTGAATGAAGTCAATGCTTCTGACAAACATGTTTGA 60
QY 21 ProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIle 40
DB 61 CCACGAGATTCTCGAGTTCGGGGTCTTCTGACTGACTTACCTTCCACCTTATC 120
QY 41 LeuThrIleThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgPro 60
DB 121 CTCACCATCAGTACCTGCTCTGATATGCTGGTGAACATGATGAAAGAGGCT 180
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80
DB 181 GCTCTGCTCTCAGGGGCACTCCTCATGTAATCACTGCAATCACTTCTTCTCG 240
QY 81 TyrMetLeuValGluLeuIleLeuSerSerTyrGlyGlyTyrAsnLeuGlnCysGln 100
DB 241 TATATGCTGTGGGCTCATCTCTCAGCTGGGAAGGATTAACAATGACGTGACG 300
QY 101 AsnLeuAspSerAlaGlyGluGlyAspValArgValAlaLysValLeuTyrTyrTyr 120
DB 301 AATTCGACAGTCAAGAGAGGATGATCCGGGTGACCAAGCTCTTGATGATCA 360
QY 121 PheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsn 140
DB 361 TTCTCCAACTAGAGGAGTTCCTGGACACGATTTCTTCTTCTGAAAAAGACCAAT 420
QY 141 GlnIleThrPheLeuHisValTyrHisHisLysSerMetPheAsnIleTyrTyrPheVal 160
DB 421 CAGATCACTTCTCTCATGCTATCAACCAAGCTCATGATCAACCTGATGATG 480
QY 161 LeuAsnTyrIleProCysGlyGlnSerPheGlyProThrLeuAsnSerPheIleHis 180
DB 481 TTGACCTGATACCTTGTGTCAAAGCTTCTTGGACCACTGAAACAGCTTATCAC 540
QY 181 IleLeuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyr 200
DB 541 ATTCTCATGATCTCTCTACGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600
QY 201 TyrLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220
DB 601 TCGAAGAGAGTCTCAACAGGCTCAAGCTGCTCAAGTCTCACTCACTCAAGCAG 660
QY 221 LeuSerAlaValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240
DB 661 CTGAGTCCGCGGAGAGCCCTGAGCTTCCCTTGGCTGCTGCTGCTGCTGCTGCT 720
QY 241 TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrTyrArgLys 260
DB 721 TATATGAGTGAAGCTGATCTGCTGCTTAACTTCTATATTCAGACATACCGGAAAG 780
QY 261 ProValLysLysGluLeuGlnGlyGluValLysAsnGlyPheProLysAlaHisLeu 280
DB 781 CCACTGAAGAAAGGCTGCAAGAGAAAGAGTGAAGATGTTTCCCAAAAGCCACTTA 840
QY 281 IleValAlaAsnGlyMetThrAspLysLysAlaGln 292
DB 841 ATTGTGCTAATGCGATGACGAGCAAGAGGCTCA 876

```

```

RESULT 2
US-09-649-199A-22
; Sequence 22, Application US/09649199A
; Publication No. US20030082754A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Thurmond, Jennifer M.
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
; FILE REFERENCE: 6804, US, 01
; CURRENT APPLICATION NUMBER: US/09/649, 199A
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 879
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-649-199A-22

Alignment Scores:
Pred. No.: 6,02e-168 Length: 879
Score: 1567.00 Matches: 292
Percent Similarity: 100.00% Mismatches: 0
Best Local Similarity: 100.00% Indels: 0
Query Match: 100.00% Gaps: 0

US-09-624-670-63 (1-292) x US-09-649-199A-22 (1-879)

QY 1 MetGlnLeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGly 20
DB 1 ATGGAGCAGCTGAAGGCTTGAATGAAGTCAATGCTTCTGACAAACATGTTTGA 60
QY 21 ProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIle 40
DB 61 CCACGAGATTCTCGAGTTCGGGGTCTTCTGACTGACTTACCTTCCACCTTATC 120
QY 41 LeuThrIleThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgPro 60
DB 121 CTCACCATCAGTACCTGCTCTCATGTAATCACTGCAATCACTTCTTCTCG 180
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80
DB 181 GCTCTGCTCTCAGGGGCACTCCTCATGTAATCACTGCAATCACTTCTTCTG 240
QY 81 TyrMetLeuValGluLeuIleLeuSerSerTyrGlyGlyTyrAsnLeuGlnCysGln 100
DB 241 TATATGCTGTGGGCTCATCTCTCAGCTGGGAAGGATTAACAATGACGTGACG 300
QY 101 AsnLeuAspSerAlaGlyGluGlyAspValArgValAlaLysValLeuTyrTyrTyr 120
DB 301 AATTCGACAGTCAAGAGAGGATGATCCGGGTGACCAAGCTCTTGATGATCA 360
QY 121 PheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsn 140
DB 361 TTCTCCAACTAGAGGAGTTCCTGACAGATTTCTTGTTCAGAAAAAGACCAAT 420
QY 141 GlnIleThrPheLeuHisValTyrHisHisLysSerMetPheAsnIleTyrTyrCysVal 160
DB 421 CAGATCACTTCTCTCATGCTCAACCAAGGCTCAAGTCTGATGATGATGATG 480
QY 161 LeuAsnTyrIleProCysGlyGlnSerPheGlyProThrLeuAsnSerPheIleHis 180
DB 481 TTGACCTGATACCTTGTGTCAAAGCTTCTTGGACCACTGAAACAGCTTATCAC 540
QY 181 IleLeuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyr 200
DB 541 ATTCTCATGATCTCTCTACGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600

```

QY	201	TriPLyLysrYrYruehrcGlnAlaGlnuValGlnPheValLeuTruLLeuTruHsStr	220
Db	601	TGAAAGAAgTACTCAcAAGSCTCAgCTGGTGCAGTTCGATCTCAcATCAAGCAACG	660
QY	221	LeuSerAlaValValylsProCysglYpheProPheglYcYsleuLlIephEgInSer	240
Db	661	CTAGAGGCCGTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTCC	720
QY	241	TyrMetMetThrIeuValIleIeuPheIeuAenPheYrIleGlnTruYrYrYsLys	260
Db	721	TATATGTGAGCGCTGGTCACTCTGTCTTAACTTCTATATTCAGACTACCGAAAAAG	780
QY	261	ProValLysLysGlnIubengInIuYsgIuValYsAengIYpheProYsAlaHsIeu	280
Db	781	CCAGTGAAGAAAGCTGCACAGAGAAAGAGCAATGGTTTCCCAAGGCCACTTA	840
QY	281	IleValAlaAsnGlyMetThrAspYsLysAlaGln	292
Db	841	ATTGTGGCTATGTCATGACGACAAAGAGGCTCAA	876

```

RESULT 3
US-10-120-637A-22
Sequence 22, Application US/10120637A
Publication No. US20030134400A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Thurmond, Jennifer M.
APPLICANT: Huang, Yung-sheng
APPLICANT: Das, Tapas
APPLICANT: Leonard, Amanda E.
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
TITLE OF INVENTION: THEROOF
FILE REFERENCE: 6804.US.P1
CURRENT APPLICATION NUMBER: US/10/120,637A
CURRENT FILING DATE: 2002-04-11
PRIORITY APPLICATION NUMBER: US 09/849,199
PRIORITY FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 73
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 22
LENGTH: 879
TYPE: DNA
ORGANISM: Mus musculus
US-10-120-637A-22

```

Alignment Scores:	
Pred. No.:	6.02e-168
Score:	1567.00
Percent Similarity:	100.00%
Best Local Similarity:	100.00%
Query Match:	100.00%
OB:	14
Length:	879
Matches:	2322
Conservative:	0
Mismatches:	0
Indels:	0
Gaps:	0

US-09-624-670-63 (1-292) X US-10-120-637A-22 (1-879)

QY	1	MeClnuLnIuLeuysaIaAPheAspaNgIvUvLaInnAlaPheLeuAspaSmePheGly	20
Db	1	ATGAGAGAGCGTGAAGGCGCTTGTATGATGAGATGCAATGCTTTGSAACAATGTTTGA	60
QY	21	ProArgAspSerArgValArgIYLPheLeuLeuAspSerTYLeuProThiPheIe	40
Db	61	CCAGAGAAATTCGAGATTCGGGGGTGGTTCCTGCTGAGACTTACTTCGCCACCTTATC	120
QY	41	LeuThriIeThiTYrIleuLeuSerIeIeTPLeuGlyAsnIysTYMeIlysAsnArgPro	60
Db	121	CTCACCAATCAAGTACTGCTCTCGAATATGGCTGGTAAACAATCATATGAGAGACGGCT	180
QY	61	AlaIeuSerLeuArgGlyIleLeuThiLeuTYrAsnLeuAlaIleThiLeuLeuSerIa	80
Db	181	GCTGTGCTCTCAGAGGGCACTCACTCTGTATTAACCTGCAGATACACTCTTCTTCGCG	240

Qy	81	TyrMetLeuValGlnLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCysGln	100
Db	241	TATATCTGTGTGAAGCTCATCTCTCCAGCTGGAGAAGAGTTCAACTTGCAGTGTCA	300
Qy	101	AsnLeuAspSerAlaGlyGlnGlyAspValArgValAlaIysValLeuTrpTrpTyr	120
Db	301	AATCTCGAAGTGCAGAGAGAAAGTGAATCTCCGGTAGCAAGACTTGTGGTGTATAC	360
Qy	121	PheSerIysLeuValGlnPheLeuAspThrIlePhePheValLeuArgValLysThrAsn	140
Db	361	TTCCTCAAACTAGTGGAGTCTCTGGACACGATTTTCTTGTCTTACGAAAAAAGACCAAT	420
Qy	141	GlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTrpCysVal	160
Db	421	CAGATACCTCTCTTCATGTCTATATACCAAGGTCATAGTTCACAACTCTGGTGGTGT	480
Qy	161	LeuAsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheHis	180
Db	481	TTGAATCGATACCTGTGTGTCAAGCTTCTTTGGACCACTCGAAGACGTTTATCCAC	540
Qy	181	IleLeuMetTyrSerTyrTyrGlnLeuSerValPheProSerMetHisLysTyrLeuTrp	200
Db	541	ATTCTCATGTACTCTTACTACGAGCTGTGTGTTCCTGTCCTCAGACCAATACCTTGG	600
Qy	201	TrpLysLysTyrIleuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr	220
Db	601	TGGAAAGAGACTCTCACAGAGCTCAGCTGGTGCAGTTCGATACACCATATCCACACG	660
Qy	221	LeuSerAlaValValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer	240
Db	661	CTAGTGGCCGTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTTCATCTTCCAGTCTCC	720
Qy	241	TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLys	260
Db	721	TATATATGACGCTGGTCACTCTGTTTAACTTCATATATTCAGACACTACCGAAAAAG	780
Qy	261	ProValLysIysGluGlnGlnLysGlnValIlysGlnGlyPheProLysAlaHisLeu	280
Db	781	CCAGTGAAGAAAGAGCTGCACAGAAAGAAAGATGGAATGTTTCCCAAGCCCACTTA	840
Qy	281	IleValAlaAsnGlyMetThrAspLysLysAlaGln	292
Db	841	ATTGTGGCTAATGTCATGACGACCAAGAAAGGCTCA	876

```

RESULT 4
US-10-156-911-5
? Sequence 5, Application US/10156911
? Publication No. US20030163842A1
? GENERAL INFORMATION:
? APPLICANT: Abbott Laboratories
? APPLICANT: Makeyrl, Pradip
? APPLICANT: Leonard, Amanda Eun-Yeong
? APPLICANT: Huang, Yung-Sheng
? APPLICANT: Pereira, Suzette L.
? TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
? FILE REFERENCE: #607 US, P4
? CURRENT APPLICATION NUMBER: US/10/156,911
? CURRENT FILING DATE: 2002-10-01
? PRIOR APPLICATION NUMBER: US 09/933,456
? PRIOR FILING DATE: 2001-07-11
? PRIOR APPLICATION NUMBER: US 09/624,670
? PRIOR FILING DATE: 2000-07-24
? PRIOR APPLICATION NUMBER: US 09/379,095
? PRIOR FILING DATE: 1999-08-23
? PRIOR APPLICATION NUMBER: US 09/145,828
? PRIOR FILING DATE: 1998-09-02
? NUMBER OF SEQ ID NOS: 122
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ. ID NO. 5
? LENGTH: 879
? TYPE: DNA
? ORGANISM: Mus musculus

```


US-10-156-911-5

Alignment Scores:

Pred. No.: 6,02e-168 Length: 879
 Score: 1567.00 Matches: 292
 Percent Similarity: 100.00% Conservative: 0
 Best Local Similarity: 100.00% Mismatches: 0
 Query Match: 100.00% Indels: 0
 DB: 14 Gaps: 0

US-09-624-670-63 (1-292) x US-10-156-911-5 (1-879)

```

QY 1 MetGluGlnLeuValAlaPheAspAsnGluValAlaAlaPheLeuAspAsnMetPheGly 20
DB 1 ATGAGACAGCTGAAGGCTTTGATATGAGTCAATGCTTTCTTGACCAACATGTTGGA 60
QY 21 ProArgAspSerArgValArgGlyTrpPheLeuLeuAspSerTrpLeuProThrPheIle 40
DB 61 CCACGAGATCTCGAGTTCGCGGAGTTCCTCGTGAACCTTACCTTCCACCTTCATC 120
QY 41 LeuThrIleThrTrpLeuLeuSerIleTrpLeuGlyAsnIleValAsnIleValAsnIle 60
DB 121 CTCACCATCATCAGTACCTGCTCTGCAATATGCTGGGTATCAAGTACATGAGAACAGGCTT 180
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTrpAsnLeuAlaIleThrLeuLeuSerAla 80
DB 181 GCTCTGCTCTCAGGAGGCTCTCTCACTTGATATACCTCGCAATCACACTTCTTCGCG 240
QY 81 TyrMetLeuValGlnLeuIleLeuSerSerTrpGluGlyValTyrAsnLeuGlnCysGln 100
DB 241 TATATGCTGTGAGAGTCACTCTCCAGCTGGAGAGAGGTTTCACACTTCAGAGTCTCAG 300
QY 101 AsnLeuAspSerAlaGlyValGluValAspValArgValAlaValValLeuTrpTrpVal 120
DB 301 AATCTCGACAGTCAGAGAGAAAGTATGCTCCGAGTACCAAGCTTGCTGTGCTACTAC 360
QY 121 PheSerTrpLeuValGlnPheLeuAspThrIlePhePheValIleuArgGlyValThrAsn 140
DB 361 TTCTCCAACTAGTGGAGTCTCTGACACGATTTCTTTGTTACGAAAAAACAACCAAT 420
QY 141 GlnIleThrPheLeuHisValIleTyrHisAlaSerMetPheAsnIleTrpTrpCysVal 160
DB 421 CAGATCACTTCTCTCATGTCTATACCAACGCGTCCATGTTCAACATCTGCTGTGTT 480
QY 161 LeuAsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180
DB 481 TTGAATCGATACCTGTGTGTCMAAGCTTTTGGACCCACCTGAAACAGCTTATCCAC 540
QY 181 IleLeuMetTrpSerTrpTrpGlyLeuSerValPheProSerMetHisValTrpLeuTrp 200
DB 541 ATTCTCATGTACTCTCTACGAGGCTGTGTCTGTCTCCGCTCCATGCAACAGTACTTTGG 600
QY 201 TrpValLeuTrpLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220
DB 601 TGGAAAGATACCTCACAACAGGCTCAGCTGAGTTCGATTCGATCCACATCAGCAACAG 660
QY 221 LeuSerAlaValValIleProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240
DB 661 CTGAGTCCGCTGTGAAGCCCTGTGCTCCCTTTGGCTGTCTCACTTCCAGTCTTCC 720
QY 241 TyrMetLeuThrLeuValIleLeuPheLeuAsnPheTrpIleGlnIleThrTrpArgGlyVal 260
DB 721 TATATGATGAGCTGTGATCTCTGTCTTAACTTCTATATTCAGACATACGGAAGAAAG 780
QY 261 ProValLeuValGlnLeuGlnIleValGluValValIleValAsnGlyPheProValAlaHisLeu 280
DB 781 CCAGTGAAGAAAGAGTGCACAGAGAAAGAGTGAAGTGTGTTCCCAAGGCCCACTTA 840
QY 281 IleValAlaAsnGlyMetThrAspTrpValAlaGln 292
DB 841 ATTGTGCTAATGCAATGACGACAAAGAGCTCAA 876

```

RESULT 5

US-10-198-846-13406

Sequence 13406, Application US/10198846

Publication No. US20030093974A1

GENERAL INFORMATION:

APPLICANT: Lillie, James

APPLICANT: Xu, Yongyao

APPLICANT: Wang, Youzhen

APPLICANT: Steinmann, Kathleen

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND

TITLE OF INVENTION: THERAPY OF BREAST CANCER

FILE REFERENCE: MRI-049

CURRENT APPLICATION NUMBER: US/10/198, 846

CURRENT FILING DATE: 2002-07-18

PRIOR APPLICATION NUMBER: 60/306,220

PRIOR FILING DATE: 2001-07-18

NUMBER OF SEQ ID NOS: 14064

SOFTWARE: fastseq for windows Version 4.0

SEQ ID NO 13406

LENGTH: 2426

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: misc. feature

LOCATION: 1, 2425, 2426

OTHER INFORMATION: n = A,T,C or G

US-10-198-846-13406

Alignment Scores:

Pred. No.: 8.13e-152 Length: 2426
 Score: 1431.00 Matches: 262
 Percent Similarity: 93.92% Conservative: 16
 Best Local Similarity: 88.51% Mismatches: 14
 Query Match: 91.32% Indels: 4
 DB: 14 Gaps: 1

US-09-624-670-63 (1-292) x US-10-198-846-13406 (1-2426)

```

QY 1 MetGluGlnLeuValAlaPheAspAsnGluValAlaAlaPheLeuAspAsnMetPheGly 20
DB 85 ATGGAACATCTAAAGGCTTTGATGATGAATCAATCTTTTGGACATATAGTTTGG 144
QY 21 ProArgAspSerArgValArgGlyTrpPheLeuLeuAspSerTrpLeuProThrPheIle 40
DB 145 CCGGAGATTCGAGTCAGAGGAGGAGTTCACGTTGACCTTACCTTCTTACCTTTT 204
QY 41 LeuThrIleThrTrpLeuLeuSerIleTrpLeuGlyAsnIleValAsnIleValAsnIle 60
DB 205 CTATGTCATGATATGCTCTCTCAATATGCTGGGTAAACAATATGAGAACAGACCT 264
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTrpAsnLeuAlaIleThrLeuLeuSerAla 80
DB 265 GCTCTTCTCCAGAGGATATCCATCCTTGTATATCTTGGATTCACACTTCTCTCGCG 324
QY 81 TyrMetLeuValGlnLeuIleLeuSerSerTrpGluGlyValTyrAsnLeuGlnCysGln 100
DB 325 TACATGCTGGAGAGCTCATTTCTTCCATCTGGGAAGAGGCTACCACTTACAGTCCA 384
QY 101 AsnLeuAspSerAlaGlyValGluValAspValArgValAlaValValLeuTrpTrpVal 120
DB 385 GATCTTCCACAGCGAGGAGGAAAGCTGACATCCGGGTAGCCMAAGTGTGTTGTGTCTAT 444
QY 121 PheSerTrpLeuValGlnPheLeuAspThrIlePhePheValIleuArgGlyValThrAsn 140
DB 445 TTCTCCAAATAGTATGAGTTCCTGAGACAAATTTCTCTTTTGGGAAAAAAGAGT 504
QY 141 GlnIleThrPheLeuHisValIleTyrHisAlaSerMetPheAsnIleTrpTrpCysVal 160
DB 505 CAGATTACTTCTTCTCATGATATCATCATGCTTCTATGTTAACTCTGCTGTGCTGTC 564
QY 161 LeuAsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180
DB 565 TTGAATCGATACCTGTGTGTCMAAGTCTTTTGGACCAACACTGAAACGTTTATCCAC 624

```



```

PRIOR APPLICATION NUMBER: 60/298,918
PRIOR FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: 60/380,710
PRIOR FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 10/172,118
PRIOR FILING DATE: 2002-06-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 1707
LENGTH: 2340
TYPE: DNA
ORGANISM: Homo sapiens
US-10-342-887-1707

Alignment Scores:
Pred. No.: 9,98e-152      Length: 2340
Score: 1430.00           Matches: 261
Percent Similarity: 93.92%      Conservative: 17
Best Local Similarity: 88.18%      Mismatches: 14
Query Match: 91.26%           Indels: 4
DB: 12                     Gaps: 1

US-09-624-670-63 (1-292) x US-10-342-887-1707 (1-2340)

QY 1 MetGluGlnLeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGly 20
DB 85 ATGGAACATCTAAGGCTTTGATGATGAACATGCTTTTGGACAAATATGTTGCA 144
QY 21 ProArgAspSerArgValArgGlyTrpPheLeuAspSerTyrLeuProThrPheIle 40
DB 145 CCGCGAGATTCCTGATCAGAGGAGGCTTACGTTGAGCTTCTTACCTCCACTTTT 204
QY 41 LeuThrIleThrTyrLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArgPro 60
DB 205 CTTACTGCTGATGATGCTCTCAATATGCTGGGAAACAATATATAGAACAGACT 264
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80
DB 265 GCTCTTCTCTCTGAGGAGTATCTCAGCTTGTATTAATCTTGAATCACACTTCTCCGCG 324
QY 81 TyrMetLeuValGluLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCysGln 100
DB 325 TACATGCTGACAGAGCTCATTTCTCTCCACTTGGGAAGAGGCTCAACTTACAGGTCAA 384
QY 101 AsnLeuAspSerIleArgGluGlyAspValArgValAlaLysValLeuTrpTrpTyr 120
DB 385 GACTTACCAAGCGGAGGAGGAGTGAATCCGAGTCCGAAAGTCTTGGTGACTAT 444
QY 121 PheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLeuThrAsn 140
DB 445 TTCTCCAAATCAGTATAGTTCCCTGGACACAAATTTTCTTGGGAAAAAAGAGAT 504
QY 141 GlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTrpTrpCysVal 160
DB 505 CAGATTACTTTCTTCATGATATCATATGCTTCAATGTTTAAATCTGGTGGGTCTC 564
QY 161 LeuAsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180
DB 565 TTGAATCGATACCTCTGTGACAAAGTTTCTTGGACCAACCTGAACAGATTGTCTCAC 624
QY 181 IleLeuMetLysSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTrp 200
DB 625 ATTCTTATGTAATCTCACTATGATGAGCTTGTGTTTCCATCTATACACAAGATCTTTGG 684
QY 201 TrpLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220
DB 685 TGGAGAAATATCTCACACAGCTCAGCTGGTGCAATTTGTCTCAATCACACAGCACACC 744
QY 221 LeuSerAlaValAlaLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240
DB 745 ATGAGCGCCGCTGTGAACCGTGTGGCTTCCCTTGGTGTCTCATCTTCCAGTCACT 804
QY 241 TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLys 260

```

```

DB 805 TATATGTAAGCTTAGTACCTCTCTTAATTTTATGTTAGACATACGAAAAAG 864
QY 261 ProValLysLysGluLeuGlnGlu-----LysGluValLysAsnGlyPhePro 276
DB 865 CCAATGAGAAAGATATCCAAAGACCACTGCAAGGAAAGATGAAGATGTTTCTCC 924
QY 277 LysAlaHisLeuIleValAlaAsnGlyMetThrAspLysLysAlaGln 292
DB 925 AAAGCTTACTTCACTGACGAAATGAGATGAACAAGAACACAA 972

RESULT 8
US-09-624-456-6
Sequence 6, Application US/09903456
Patent No. US2002013874A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407 US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
PRIOR FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 6
LENGTH: 900
TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-6

Alignment Scores:
Pred. No.: 1.35e-98      Length: 900
Score: 956.50           Matches: 168
Percent Similarity: 71.58%      Conservative: 36
Best Local Similarity: 58.95%      Mismatches: 78
Query Match: 61.04%       Indels: 3
DB: 9                     Gaps: 1

US-09-624-670-63 (1-292) x US-09-903-456-6 (1-900)

QY 4 LeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGlyProArgAsp 23
DB 1 ATGGAACATTTGAGTGGCTCACTGATCAATTTCAAGGCTTCTGGGCCCCGAGAT 60
QY 24 SerArgValArgGlyTrpPheLeuLeuAspSerTyrLeuProThrPheIleLeuThrIle 43
DB 61 ACAAGAGTCAAGAGATGTTCTCTCTGACAAATTAATCCCTAGTTGTGTTGTTGTT 120
QY 44 ThrTyrLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63
DB 121 ATTACTTACTATGTAATGCTGTGACCAAAATACATGAAGAACCGGACCGCTTCT 180
QY 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAlaIyrMetLeu 83
DB 181 TCCCGAGGATCTCAGTTGATATACCTTGAAGTCAACCCGCTGTCTCTACATGTTTC 240
QY 84 ValGluLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
DB 241 TATGATGTTGTACACAGCTGTGTGGAGGCAAAATACAACTTTTCTGCCAGGAAACGC 300
QY 104 SerAlaGlyGluGlyAspValArgValAlaLysValLeuTrpTrpTyrPheSerLys 123
DB 301 AGCGGCGGAGATCCGATATGAAGATCATCCGCTCTGTGTGTACTTCTCCAAA 360
QY 124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThr 143

```

```

Db 361 CTCATCGAATTCATGAGACCTTTTCTCATCTTGGCAAGAACCAACCAACGATCCACC 420
Qy 144 PheLeuHisValTYRHisHisAlaSerMetPheAsnIleTyrTrpCysValLeuAsnTrp 163
Db 421 GGGCTCCATGCTACCAACCAACGATACGATGCTCAACATCGTGGTGGTGGATGAACTGG 480
Qy 164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
Db 481 GTTCCGTGGGCAATTCATATTGTTGGCAGACCTCAACAGCTTCATCCATGCTCCATG 540
Qy 184 TyrSerTYRTrpGlyLeuSerValPheProSerMetHisIleTyrLeuTrpIlePheGly 203
Db 541 TACTGTACTATGCTGCTCTCTCCATCCGCTCCATGCTCCATGCTCCATGCTCCATGCT 600
Qy 204 TyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThrLeuSerAla 223
Db 601 TACATCACTCAAGGGCAGCTGCTCAGTTGCTGCAAAATCCAGACGACCTCGGG 660
Qy 224 ValValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTYRMetMet 243
Db 661 GTTCTTGCCCATGCTCTCTCTCTCTCGGCTGCTCTCTCTCTCTCTCTCTCTCTCTCT 720
Qy 244 ThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTYRArgLysLysProValLys 263
Db 721 TCCCTGATTGCTCTCTCTCAAACTTCACTTCACTTCACTTCACTTCACTTCACTTCA 780
Qy 264 LysGluLeuGlnGluLysGluValLysAsnGlyPheProLysAlaHisLeuIleValAla 283
Db 781 CGG-----AGGAAAGACCACCTGAGAGGCCACCAAGAGGGGTCTGTGGCCGCGCTC 831
Qy 284 AsnGlyMetThrAsp 288
Db 832 AACGGACACACCAAC 846

RESULT 9
US-10-156-911-6
; Sequence 6, Application US/10156911
; Publication No. US20030163845A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US P4
; CURRENT APPLICATION NUMBER: US/10/156,911
; CURRENT FILING DATE: 2002-10-01
; PRIOR APPLICATION NUMBER: US 09/503,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 900
; TYPE: DNA
; ORGANISM: Mus musculus
; US-10-156-911-6

Alignment Scores:
Pred. No.: 1,356-98 Length: 900
Score: 956.50 Matches: 168
Percent Similarity: 71.58% Conservative: 36
Best Local Similarity: 58.95% Mismatches: 78
Query Match: 61.04% Indels: 1
DB: 14 Gaps: 1

```

```

US-09-624-670-63 (1-292) x US-10-156-911-6 (1-900)
Qy 4 LeuLysAlaPheAsnGlnValAsnAlaPheLeuAsnSerMetPheGlyProArgAsp 23
Db 1 ATGGAACTTTCGATGGCTGCTACCTACCTATTTCAAGCCCTTCTGGGCCCCGAGAT 60
Qy 24 SerArgValArgGlyTrpPheLeuAsnSerTYRLeuProThrPheIleLeuThrIle 43
Db 61 ACAAGAGTCAAAGATGGTCTCTCTCGACATATTAATCCATCGTTTGTCTGTCTGT 120
Qy 44 ThrTYRLeuSerIleTyrPheLysValLysTYRMetLysAsnArgProAlaLeuSer 63
Db 121 ATTACTTACTCATTTGATGCTGGAGCCAAATATCATAGAACAGCCGAGCTTCTCT 180
Qy 64 LeuArgGlyIleLeuThrLeuTYRAsnLeuAlaIleThrLeuSerAlaTYRMetLeu 83
Db 181 TGGCAGGCACTCCGACGTTGATTAACCTTGACACTACCTGTGCTCTCTACATGTT 240
Qy 84 ValGluLeuIleLeuSerSerTyrGluGlyTYRAsnLeuGlnCysGlnAsnLeuAsp 103
Db 241 TATGAGTTGGTGAAGAGTGTGGAGGGCAATACACTTTTCTGCCAGGGAACACGC 300
Qy 104 SerIleArgGlyLysPheValArgValAlaLysValLeuTrpTyrTrpPheSerLys 123
Db 301 AGCCGGGAGATCCGATATGAAATCATCCGGCTCTGTGTGTAATCTTCTCAAA 360
Qy 124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThr 143
Db 361 CTCATCAATTCATGACGACCTTTTCTTATCTCTTGGCAAGAACCAACGACGATCAC 420
Qy 144 PheLeuHisValTYRHisHisAlaSerMetPheAsnIleTyrTrpCysValLeuAsnTrp 163
Db 421 GTGCTCATGCTGCTACCAACGCTACCATCTCAACATCTGGGTGTTGTGATGATCTG 480
Qy 164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
Db 481 GTTCCGTGGGCAATTCATATTGTTGGCAGACCTCAACAGCTTCATCCATGCTCCATG 540
Qy 184 TyrSerTYRTrpGlyLeuSerValPheProSerMetHisIleTyrLeuTrpIlePheGly 203
Db 541 TACTGTACTATGCTGCTCTCTCTCATCCGCTCCATCCGCTCCATCCGCTCCATCCG 600
Qy 204 TyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThrLeuSerAla 223
Db 601 TACATCACTCAAGGGCAGCTGCTCAGTTGCTGCAATTCATCCAGACGACCTCGGG 660
Qy 224 ValValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTYRMetMet 243
Db 661 GTTCTTGCCCATGCTCTCTCTCTCTCGGCTGCTCTCTCTCTCTCTCTCTCTCTCTCT 720
Qy 244 ThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTYRArgLysLysProValLys 263
Db 721 TCCCTGATTGCTCTCTCTCAAACTTCACTTCACTTCACTTCACTTCACTTCACTTCA 780
Qy 264 LysGluLeuGlnGluLysGluValLysAsnGlyPheProLysAlaHisLeuIleValAla 283
Db 781 CGG-----AGGAAAGACCACCTGAGAGGCCACCAAGAGGGGTCTGTGGCCGCGCTC 831
Qy 284 AsnGlyMetThrAsp 288
Db 832 AACGGACACACCAAC 846

RESULT 10
US-09-903-456-3
; Sequence 3, Application US/09903456
; Patent No. US2002013874A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

```

FILE REFERENCE: 6407.US.P3
 CURRENT APPLICATION NUMBER: US/09/903,456
 CURRENT FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24
 PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO: 3
 LENGTH: 914
 TYPE: DNA
 ORGANISM: Homo sapiens
 US-09-903-456-3

Alignment Scores:

Pred. No.:	Score:	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
6,96e-97	941.50	914	165	43	73	5	2
Percent Similarity:	72.73%						
Best Local Similarity:	57.69%						
Query Match:	60.08%						

US-09-624-670-63 (1-292) x US-09-903-456-3 (1-914)

Qy 4 LeuValaPheAspAenGluValaAsnAlaPheLeuAspAsnMetPheGlyProArgAsp 23
 Db 1 ATGGAACATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 60
 Qy 24 SerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIleuThrIle 43
 Db 61 ACTAGAGTAAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 120
 Qy 44 ThrTyrLeuLeuSerIleTyrPheLeuGlyAsnLeuTyrMetLeuAspArgProAlaLeuSer 63
 Db 121 ATATATTACTAATTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 180
 Qy 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAlaTyrMetLeu 83
 Db 181 TGCCGGGGGATTTAGTGTGTATTAACCTTGACCTGACCTGCTGCTGCTGCTGCTGCT 240
 Qy 84 ValGluLeuIleLeuSerSerTyrGluGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
 Db 241 TGTAGTTAGTAACAGAGATGATGATGATGATGATGATGATGATGATGATGATGATG 300
 Qy 104 SerAlaGlyGluGlyAspValArgValAlaIleValLeuTyrPheTyrPheSerIys 123
 Db 301 ACCCGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 360
 Qy 124 LeuValGluPheLeuAspTyrIlePhePheValLeuArgIleYsThrAsnGlnIleThr 143
 Db 361 CTCATGAGATTATGACACCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 420
 Qy 144 PheLeuHisValTyrHisAlaSerMetPheAsnIleTyrPheCysValLeuAsnTyr 163
 Db 421 GTCTGACACGCTTCCACCATGCTCATGCTGAACATCTGGTGGTTGTGATGAACCTG 480
 Qy 164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
 Db 481 GTCCCGTGGCGCCACTTATTTTGTGGTGCACACTTAATGCTTCACTCCACCTCTCATG 540
 Qy 184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisSerTyrLeuTyrPheIys 203
 Db 541 TACTCTTACTATGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 600
 Qy 204 TyrLeuThrGlnAlaGlnLeuValArgValAlaIleValLeuTyrIleThrHisThrIleuSerAla 223
 Db 601 TACATCACTCAGGGGAGACCTGCTCATGTTGTGTGATCATCATCAGACACGACGCGGG 660
 Qy 224 ValValIysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTyrMetMet 243

Db 661 GTCACTGGCCGTGACATTCCTTGGTTGATTTCCAGATTGATACATTAATT 720
 Qy 244 ThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgIysPheValIys 263
 Db 721 TCCCTGATGCTCTCTTCCAAACTTACATTCAGACCTTCAACAGAAAGGGGCTCC 780
 Qy 264 LysGluLeuGlnGlu--LysGluValIysAsnGlyPheProIysAlaHisLeuIleVal 282
 Db 781 CGAAGGAAAGACCACTGAGAGGACCAACAGATGAGG-----TCCGTGCTGCT 828
 Qy 283 AlaAsnGlyMetThrAsp 288
 Db 829 GTGATGACACACCAAC 846

RESULT 11

US-09-769-863-21

Sequence 21, Application US/09769863

Publication NO. US20030157144A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Huang, Yung-Sheng

APPLICANT: Das, Tapas

APPLICANT: Thurnmond, Jennifer

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

FILE REFERENCE: 6763.US.01

CURRENT APPLICATION NUMBER: US/09/769,863

CURRENT FILING DATE: 2001-01-25

NUMBER OF SEQ ID NOS: 32

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 21

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

US-09-769-863-21

Alignment Scores:

Pred. No.:	Score:	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
6,96e-97	941.50	914	165	43	73	5	2
Percent Similarity:	72.73%						
Best Local Similarity:	57.69%						
Query Match:	60.08%						

US-09-624-670-63 (1-292) x US-09-769-863-21 (1-914)

Qy 4 LeuValaPheAspAenGluValaAsnAlaPheLeuAspAsnMetPheGlyProArgAsp 23
 Db 1 ATGGAACATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 60
 Qy 24 SerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIleuThrIle 43
 Db 61 ACTAGAGTAAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 120
 Qy 44 ThrTyrLeuLeuSerIleTyrPheLeuGlyAsnLeuTyrMetLeuAsnArgProAlaLeuSer 63
 Db 121 ATATATTACTAATTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 180
 Qy 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAlaTyrMetLeu 83
 Db 181 TGCCGGGGGATTTAGTGTGTATTAACCTTGACCTGACCTGCTGCTGCTGCTGCTGCT 240
 Qy 84 ValGluLeuIleLeuSerSerTyrGluGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
 Db 241 TGTAGTTAGTAACAGAGATGATGATGATGATGATGATGATGATGATGATGATGATG 300
 Qy 104 SerAlaGlyGluGlyAspValArgValAlaIleValLeuTyrPheTyrPheSerIys 123
 Db 301 ACCCGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 360
 Qy 124 LeuValGluPheLeuAspTyrIlePhePheValLeuArgIleYsThrAsnGlnIleThr 143

```

Db      361 CTCATGAAATTATGAGACATTCTTCTTCTGCGCAAGAACCAACCGCATCAG 420
QY      144 PheLeuHisValTYRHisHisAlaSerMetPheAsnIleTPRTPCyValLeuAsnTP 163
Db      421 GTCCTGACAGCTTACACATGCGCTGATGCTGAACAATCGTGATTGTGATGAACCTGG 480
QY      164 TLeProCyGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
Db      481 GTCCTGCGGGCCACTCTTATTGTTGGTCCACACTTAATAGCTTACCAACGCTCCATG 540
QY      184 TYSerTYRTYRGLYLeuSerValPheProSerMetHisLYSTYRLeuTPRTPLYS 203
Db      541 TACTCTTACTATGTTGTTTCTGTCAGTCCCTTCCATGCGTCCATACCTCTGTGGAAGAG 600
QY      204 TYRLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThrLeuSerAla 223
Db      601 TACATCAGCTCAGGGGCGACACTGCTTCAAGTTTGCTGCAATCATCCAGACAGCAGCTGGG 660
QY      224 ValValLYSProCYSGLYPheProPheGlyCYsLeuIlePheGlnSerSerTYRMetMet 243
Db      661 GTCATCTGCGCCCTGACACATTCCTCTTGTTGTTGTTATTTCCAGATGGATACATTATT 720
QY      244 ThrLeuValIleLeuPheLeuAsnPheTYRleGlnThrTYRArgLYSProValLYS 263
Db      721 TCCCTGATTGCTCTCTTCAAACTTCTACATTCAGACTACAAACAAGAGGGGCTCC 780
QY      264 LYSGluLeuGlnGlu---LYSGluValLYSAsnGlyPheProLYSAlaHisLeuIleVal 282
Db      781 CGAAGGAAAGACACACCTGTAAGGACCAACCAAGATGG-----TCCGTGGCTGCT 828
QY      283 AlaAsnGlyMetThrAsp 288
Db      829 GTGAATGGACACACCAAC 846

RESULT 12
US-10-156-911-3
/ Sequence 3, Application US/10156911
/ Publication No. US20030163845A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407 US P4
/ CURRENT APPLICATION NUMBER: US/10/156,911
/ PRIOR FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1998-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 3
/ LENGTH: 914
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-10-156-911-3

Alignment Scores:
Pred. No.: 6,96e-57 Length: 914
Score: 941.50 Matches: 165
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.68% Mismatches: 73
Query Match: 60.08% Indels: 5
DB: 14 Gaps: 2
US-09-624-670-63 (1-292) x US-10-156-911-3 (1-914)

```

```

QY      4 LeuLYSAlaPheAsnGlnValAlaAsnAlaPheLeuAsnSerMetPheGlyProArgAsp 23
Db      1 ATGGACATTTTGTATGATCATCTAGTACCTATTTCAGAGCATGTGATGCGCTCGAGAT 60
QY      24 SerArgValArgGlyTPRLeuLeuAsnSerTYRLeuProThrPheIleLeuThrIle 43
Db      61 ACTAGAGTAAAGATGTTTCTTCTGACATATTATACCCACTTATTCGCTGTC 120
QY      44 ThrTYRLeuSerIleTPRLeuGlyAsnLYSTYRmetLYSAsnArgProAlaLeuSer 63
Db      121 ATATATTACTAATTGATGCTGGGACCAAAATACATGAGATTAACAGCATTCCT 180
QY      64 LeuArgGlyIleLeuThrLeuTYRAsnLeuAlaIleThrLeuSerAlaTYRmetLeu 83
Db      181 TCCCGGGGATTTAGTGGTGAATGATACCTTGACCTGCTGCTCTGTTATGTTTC 240
QY      84 ValGluLeuIleLeuSerSerTPRGLYGLYTYRAsnLeuGlnCYSGlnAsnLeuAsp 103
Db      241 TGTGAGTTAGTAAACAGAGATAGGAAAGCAAAATACACTTCTGTCAGGGCACACGC 300
QY      104 SerAlaGlyGlnLYSAspValArgValAlaLYSValLeuThrTPRTPRTPRTPRTPR 123
Db      301 ACCGACGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 360
QY      124 LeuValGluPheLeuAsnTPRTrIlePhePheValLeuArgLYSLeuThrAsnGlnIleThr 143
Db      361 CTCATGAAATTATGACACACTTCTTCTTATCTGCGCAAGAACCAACGACGATCAG 420
QY      144 PheLeuHisValTYRHisHisAlaSerMetPheAsnIleTPRTPCyValLeuAsnTP 163
Db      421 GTCCTGACAGCTTACACATGCGCTGATGCTGACATCTGAGCTGGTTGTGAGAACTGG 480
QY      164 TLeProCYSGLYGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
Db      481 GTCCTGCGGCCCTCTTATTGTTGCGCACATTAATGCTTATCCACGCTCCATG 540
QY      184 TYSerTYRTYRGLYLeuSerValPheProSerMetHisLYSTYRLeuTPRTPLYS 203
Db      541 TACTCTTACTATGTTGTTGCTGTCAGTCCCTTCATGCGTCAATACCTCTGTGGAAGAG 600
QY      204 TYRLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThrLeuSerAla 223
Db      601 TACATCAGCTCAGGGGCGACCTGCTTCAAGTTTGCTGCAATCATCCAGACAGCAGCTGGG 660
QY      224 ValValLYSProCYSGLYPheProPheGlyCYsLeuIlePheGlnSerSerTYRMetMet 243
Db      661 GTCATCTGCGCCCTGACACATTCCTCTTGTTGTTGTTATTTCCAGATGGATACATTATT 720
QY      244 ThrLeuValIleLeuPheLeuAsnPheTYRleGlnThrTYRArgLYSProValLYS 263
Db      721 TCCCTGATTGCTCTCTTCAAACTTCTACATTCAGACTACAAACAAGAGGGGCTCC 780
QY      264 LYSGluLeuGlnGlu---LYSGluValLYSAsnGlyPheProLYSAlaHisLeuIleVal 282
Db      781 CGAAGGAAAGACACACCTGTAAGGACCAACCAAGATGG-----TCCGTGGCTGCT 828
QY      283 AlaAsnGlyMetThrAsp 288
Db      829 GTGAATGGACACACCAAC 846

RESULT 13
US-10-054-534B-21
/ Sequence 21, Application US/10054534B
/ Publication No. US20030167525A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Das, Tapas
/ APPLICANT: Thurmond, Jennifer M.
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

```

```

FILE REFERENCE: 6763.US.P1
CURRENT APPLICATION NUMBER: US/10/054,534B
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: US 09/769,863
PRIOR FILING DATE: 2001-01-25
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 21
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-10-054-534B-21

Alignment Scores:
Pred. No.: 6,96e-97 Length: 914
Score: 941.50 Matches: 165
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.69% Mismatches: 73
Query Match: 60.08% Indels: 5
DB: 14 Gaps: 2

US-09-624-670-63 (1-292) x US-10-054-534B-21 (1-914)
QY 4 LeuValAlaPheAspGluValAlaPheLeuAspAsnMetPheGlyProArgAsp 23
DB 1 ATGGAACTTTTGAATGATGATCCTAGTACCTATTTCAGGCAATGGTGGCCCTGAGAT 60
QY 24 SerArgValArgGlyTTPheLeuAspSerTyrLeuProThrPheIleLeuThrIle 43
DB 61 ACTGAGTAAAGATAGTGTCTTCTGCAATATATATACCATTTATCTGCTGTCTC 120
QY 44 ThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63
DB 121 ATATATTACTAATTGATGCTGGGACCAAAATACATGAGATTAAGCCATTCTCT 180
QY 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuSerAlaTyrMetLeu 83
DB 181 TGGCGGGGATTTAGTGTGTATACCTTGACCTGACCTGCTGTGTATATGTTTC 240
QY 84 ValGluLeuLeuSerSerTyrGluGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
DB 241 TGTGAGTTAGTAACAGAGATAGGAAAGCAATATACATCTTCTGTGAGGGCACAGC 300
QY 104 SerArgValArgGlyTTPheLeuAspValArgValAlaLysValLeuTyrTyrTyrPheSerLys 123
DB 301 ACCGACAGAGATACAGATATGATGAAGATTATCCGGTCTGTGGTACTACTTCCAAA 360
QY 124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysIleThrAsnGlnIleThr 143
DB 361 CTGATAGATTTATGACACTTCTTCTTCTATCTCTGCAAGAACACACACAGATTCAG 420
QY 144 PheLeuHisValIleThrHisAlaSerMetPheAsnIleTyrTyrCysValLeuAsnTyr 163
DB 421 GTCCGTCACGTCATCCACCATGCTGATGTCGAAATCTGGGTGTGTGTATGATGACGG 480
QY 164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
DB 481 GTCCCTCGCGCCACTTATTTTGGTGCACACTTAATAGCTTATTCACACGCTCTCTG 540
QY 184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyrTyrLys 203
DB 541 TACTCTTACTATGTTGTGTGTCAGTCCCTTCATGCGTCATACCTGTGGGGAAG 600
QY 204 TyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThrLeuSerAla 223
DB 601 TACTACTACTGAGGGGAGCTGCTTCAGTTGTGTACATCATCCAGACCGCTGGGG 660
QY 224 ValValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTyrMetMet 243
DB 661 GTATCTGGCGGACGATCATCTCTGTTGGTGTGTATATTCAGATTTGATACATATTT 720
QY 244 ThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLysProValLys 263
DB 244 ThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLysProValLys 263

```

```

DB 721 TCCCTGATTGCTCTCTTCACAACTTCTACATTCAGACTTACACAGAAAGGGCCCTCC 780
QY 264 LysGluLeuGlnGlu---LysGluValLysAsnGlyPheProLysAlaHisLeuIleVal 282
DB 781 CGAAGGAAAGACCACTGAAAGGACCAACAGATAGG-----TCCGTGGCTGCT 828
QY 283 AlaAsnGlyMetThrAsp 288
DB 829 GTGATGTGACACACCAAC 846

RESULT 14
US-10-408-736-3
Sequence 3, Application US/10408736
Publication No. US2003017508A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Das, Tapas
APPLICANT: Huang, Yung-Sheng
APPLICANT: Parker-Barnes, Jennifer M.
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Thurmond, Jennifer M.
TITLE OR INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407.US.P1
CURRENT APPLICATION NUMBER: US/10/408,736
CURRENT FILING DATE: 2003-04-04
PRIOR APPLICATION NUMBER: US/09/379,095A
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 81
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 3
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-10-408-736-3

Alignment Scores:
Pred. No.: 6,96e-97 Length: 914
Score: 941.50 Matches: 165
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.69% Mismatches: 73
Query Match: 60.08% Indels: 5
DB: 14 Gaps: 2

US-09-624-670-63 (1-292) x US-10-408-736-3 (1-914)
QY 4 LeuValAlaPheAspGluValAlaPheLeuAspAsnMetPheGlyProArgAsp 23
DB 1 ATGGAACTTTTGAATGATGATCCTAGTACCTATTTCAGGCAATGGTGGCCCTGAGAT 60
QY 24 SerArgValArgGlyTTPheLeuAspSerTyrLeuProThrPheIleLeuThrIle 43
DB 61 ACTGAGTAAAGATAGTGTCTTCTGCAATATATATACCATTTATCTGCTGTCTC 120
QY 44 ThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63
DB 121 ATATATTACTAATTGATGCTGGGACCAAAATACATGAGATTAAGCCATTCTCT 180
QY 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuSerAlaTyrMetLeu 83
DB 181 TGGCGGGGATTTTGTGTGTATACCTTGACCTGACACACGCTGTCTGTATATGTTTC 240
QY 84 ValGluLeuLeuSerSerTyrGluGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
DB 241 TGTGAGTTAGTAACAGAGATAGGAAAGCAATATACATCTTCTGTGAGGGCACAGC 300
QY 104 SerArgValArgGlyTTPheLeuAspValArgValAlaLysValLeuTyrTyrTyrPheSerLys 123
DB 301 ACCGACAGAGATACAGATATGATGAAGATTATCCGGTCTGTGGTACTACTTCCAAA 360
QY 124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysIleThrAsnGlnIleThr 143

```


TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-6

Alignment Scores:

Pred. No.: 3,97e-181 Length: 900
Score: 1651.00 Matches: 299
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 9 Gaps: 0

US-09-624-670-64 (1-299) x US-09-903-456-6 (1-900)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyPheValAlaPheLeuGlyProArgAsp 20
DB 1 ATGGAAATTTGATGGTGCATCTACCTACCTATTCAGAGCTTCTGGCCCGGAGAT 60
QY 21 ThrArgValIysGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
DB 61 ACAAGAGTCAAGAGATGGTCTCCCTGGACAAATTAATCATCCCTACCGTTGTCTGTTCTT 120
QY 41 IleTyrLeuLeuValTyrPheLeuGlyProIysTyrMetIysAsnArgGlnProPheSer 60
DB 121 ATTACTTACTCTATGATGCTGGAGCCAAATACATGAAGACCGGACCGCTTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
DB 181 TGCCGAGGATCCCGAGTGTATTAACCTTGACCTCAGCTGCTGCTCTACATGTTTC 240
QY 81 TyrGlnLeuValThrGlyValTyrGlnGlyIysTyrAsnPhePheCysGlnGlyThrArg 100
DB 241 TATGAGTGTGACAGGTGTGGAGGGGCAATATCACTTTTTCGCGAGGAGACAGC 300
QY 101 SerAlaGlyIleSerAspMetIysIleIleArgValLeuTyrTyrTyrPheSerIys 120
DB 301 AGCCGGGAGATCCGATGAGATGATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 360
QY 121 LeuIleGlnPheMetAspThrPhePhePheIleLeuArgIysAsnAsnIleGlnIleThr 140
DB 361 CTCATCGAATTCATGGACACCTTTTCTTCATCTTCGCAAGACACCAACGACGATGACC 420
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
DB 421 GTGCTCATGCTACACACGCTACAGCTGCTACATCTGATGCTGCTGCTGCTGCTGCTGCTGCT 480
QY 161 ValProCysGlyHisSerTyrPheGlyValAlaThrLeuAsnSerPheIleHisValLeuMet 180
DB 481 GTTCCCTGGCGGCAATCATATTTTGGTGGACACTCAACAGCTTCATCATGCTCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrIys 200
DB 541 TACCGTACTATGCTGCTCTCCATCCGCTCATCCGCTCATCCCTGCTGCTGCTGCTGCTGCT 600
QY 201 TyrIleThrGlnGlyLeuValAlaGlnPheValLeuThrIleIleGlnIleThrCysGly 220
DB 601 TACTACTCTCAAGGCGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
QY 221 ValPheTyrProCysSerPheProLeuGlyTyrPhePhePheGlnIleGlyTyrMetIle 240
DB 661 GTCTTCTGGCGGATCTCTCTCCCTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnIleThrTyrAsnIysValIleSer 260
DB 721 TCCCTGATGCTCTCTTCAAACTTCTACATTCACATTCACAAAGAAAGGCGCTCT 780
QY 261 ArgArgIysAspHisLeuIysGlyHisGlnAsnGlySerValAlaIleValAsnGlyHis 280
DB 781 CGAGGAAAGACCACTGAGGCGGACCAAGACGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 840
QY 281 ThrAsnSerPheProSerLeuGlnIysSerValIysProArgIysGlnArgIysArg 299
DB 841 ACCAAGAGCTTCCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 897

```

RESULT 2

US-10-156-911-6

```

/ Sequence 6, Application US/10156911
/ Publication No. US20030163845A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradipt
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Perez, Suzette L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407.US.P4
/ CURRENT APPLICATION NUMBER: US/10/156,911
/ PRIOR FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 6
/ LENGTH: 900
/ TYPE: DNA
/ ORGANISM: Mus musculus
US-10-156-911-6

```

Alignment Scores:

Pred. No.: 3,97e-181 Length: 900
Score: 1651.00 Matches: 299
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 14 Gaps: 0

US-09-624-670-64 (1-299) x US-10-156-911-6 (1-900)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyPheValAlaPheLeuGlyProArgAsp 20
DB 1 ATGGAAATTTGATGGTGCATCTACCTACCTATTCAGAGCTTCTGGCCCGGAGAT 60
QY 21 ThrArgValIysGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
DB 61 ACAAGAGTCAAGAGATGGTCTCCCTGGACAAATTAATCAATGATGTTGTCTGTTCTT 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIysTyrMetIysAsnArgGlnProPheSer 60
DB 121 ATTACTTACTCTATGATGCTGGAGCCAAATACATGAAGACCGGACCGCTTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
DB 181 TGCCGAGGATCCCGAGTGTATTAACCTTGACCTCAGCTGCTGCTCTACATGTTTC 240
QY 81 TyrGlnLeuValThrGlyValTyrGlnGlyIysTyrAsnPhePheCysGlnGlyThrArg 100
DB 241 TATGAGTGTGACAGGTGTGGAGGGGCAATATCACTTTTTCGCGAGGAGACAGC 300
QY 101 SerAlaGlyIleSerAspMetIysIleIleArgValLeuTyrTyrTyrPheSerIys 120
DB 301 AGCCGGGAGATCCGATGAGATGATCCGCGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 360
QY 121 LeuIleGlnPheMetAspThrPhePhePheIleLeuArgIysAsnAsnIleGlnIleThr 140
DB 361 CTCATCGAATTCATGGACACCTTTTCTTCATCTTCGCAAGACACCAACGATGACC 420
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
DB 421 GTGCTCATGCTACACCAACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480

```

```

QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db GTTCCCTGGCCCATTCATATTGGTGGCACTCAACAGCTTCATCCATGTCCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTTPTPlyGlyS 200
Db 541 TACTGGTACTATGCTGCTCTCCCTCCATCCCGGTCACAGGTCCCTACCTCTGTGAAAG 600
QY 201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrTrpCysGly 220
Db 601 TACATCACTCAAGGCGACGTGCTCAGTTTGCTGACATCAATCCAGACGACCTCGGG 660
QY 221 ValPheTrpProCysSerPheProLeuGlyTyrPheLeuPheGlnIleGlyTyrMetIle 240
Db 661 GTCTTCTGGCCCATGCTCTCTCCCTCCCTCGGCTGCTGCTCCAGATTGATACATGAT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleValGlyAlaSer 260
Db 721 TCCCTGATTTGCTCTTCAACAACCTTCACTTCAAGCTTCAACAAGAAAGGGGCTCT 780
QY 261 ArgArgLysAspHisLeuLysGlyHisGlnAsnGlySerValAlaAlaValAsnGlyHis 280
Db 781 CGAGAGAAAGACCACTGTAAGGGCCACAGAGCGGTCTGTGGCCGCGTCAACGAGCAC 840
QY 281 ThrAsnSerPheProSerLeuGlnAsnSerValLysProArgLysGlnArgLysAsp 299
Db 841 ACCAACAAGCTTCCCTTCCCTCGAAGAACGCTGAGCCGAGAGCGAAGGAT 897

```

RESULT 3

```

US-09-903-456-3
; Sequence 3, Application US/09903456
; Patent No. US2002013874A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-903-456-3

```

Alignment Scores:

```

Pred. No.: 2,4e-170 Length: 914
Score: 1558.00 Matches: 278
Percent Similarity: 97.32% Conserved: 13
Best Local Similarity: 92.98% Mismatches: 8
Query Match: 94.37% Indels: 0
Db: 9 Gaps: 0

```

US-09-624-670-64 (1-299) x US-09-903-456-3 (1-914)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheLysAlaPheLeuGlyProArgAsp 20
Db 1 ATGGAAACATTTGATGATCACTAGTACCTATTTCAGGATGCTAGGCGCCCGAGAT 60
QY 21 ThrArgValLysGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
Db 61 ACTAAGATAAAGATGCTTCTCTGACAAATATATACCAACATTTATCTGCTGCTGCT 120

```

```

QY 41 IleTyrLeuLeuIleValTTPLeuGlyProLysTyrMetLysAsnArgGlnProPheSer 60
Db 121 ATATATTACTAATTGATGCTGCGGACCAAAATACATGAGAAATAAAGCCATCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
Db 181 TGCCGGGGGATTTAGTGGGTATATACCTTGGACTACACTGCTGCTCTGTATAGTTTC 240
QY 81 TyrGluLeuValThrGlyValTTPGluGlyLysTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TGTAGTTAGTAAAGAGATGAGAGAGGAAATACATCTTCTTCTGTCAGGACCAACGC 300
QY 101 SerIleGlyLysSerAspMetLysIleIleArgValLeuTTPTPtyrTyrPheSerLys 120
Db 301 ACCGAGAGATACAGATATGAGATATACGCTGCTCTGCTGCTGCTGCTGCTGCTGCT 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgLysAsnAsnHisGlnIleThr 140
Db 361 CTCTAGATTTATGACACTTCTTCTTATCTTCTGCGCAAGAACCAACCAAGATCACG 420
QY 141 ValLeuHisValTyrHisAlaThrMetLeuAsnIleTTPTPPheValMetAsnTTP 160
Db 421 GTCCCTGACCGCTACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db 481 GTCCCTGCGGCGCACTCTTATTTTGGTGGCCACCTTATAGCTTCAATCCACGCTCC 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTTPTPlyGlyS 200
Db 541 TACTCTTACATGATGTTGTGTGCTAGCTTCCATGCTGCTGCTGCTGCTGCTGCTGCT 600
QY 201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrTrpCysGly 220
Db 601 TACATCACTCAAGGCGACGTGCTCAGTTTGCTGACATCAATCCAGACGACCTCGGG 660
QY 221 ValPheTrpProCysSerPheProLeuGlyTyrPheLeuPheGlnIleGlyTyrMetIle 240
Db 661 GTCACTGCGCGGTCAATCCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleValGlyAlaSer 260
Db 721 TCCCTGATTTGCTCTTCAACAACCTTCACTTCAAGCTTCAACAAGAAAGGGGCTCT 780
QY 261 ArgArgLysAspHisLeuLysGlyHisGlnAsnGlySerValAlaAlaValAsnGlyHis 280
Db 781 CGAAGAAAGACCACTGTAAGGGCCACAGAGCGGTCTGTGGCCGCGTCAACGAGCAC 840
QY 281 ThrAsnSerPheProSerLeuGlnAsnSerValLysProArgLysGlnArgLysAsp 299
Db 841 ACCAACAAGCTTTCACCCCTGGAAGAACATGTAGAGCCAGAAAGCTGCGAAGGAT 897

```

RESULT 4

```

US-09-769-863-21
; Sequence 21, Application US/09769863
; Publication No. US20030157144A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; APPLICANT: Thurmond, Jennifer
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763 US.O1
; CURRENT APPLICATION NUMBER: US/09/769,863
; PRIOR FILING DATE: 2001-01-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 914
; TYPE: DNA

```

ORGANISM: Homo sapiens
US-09-769-863-21

Alignment Scores:
Pred. No.: 2,4e-170 Length: 914
Score: 1558.00 Matches: 278
Percent Similarity: 97.32% Conservative: 13
Best Local Similarity: 92.98% Mismatches: 8
Query Match: 94.37% Indels: 0
Gaps: 0

US-09-624-670-64 (1-299) x US-09-769-863-21 (1-914)

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
DB 1 ATGGAACATTTTATGATGATCACTTAATCACTTAATCAAGCATTTGCTGAGCCCTCGAGAT 60
QY 21 ThrArgValIleGlyTyrPheLeuLeuAspSerThrIleProThrPheValCysSerVal 40
DB 61 ACTGAGTAAAGAGATGTTCTTCTGACAAATTATATCCACATTTATCTGCTCTGTC 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIleTyrMetLeuAsnArgIleProPheSer 60
DB 121 ATATATTACTTAATTGATGCTGGACCAAAATATACATGAGAAATAAACAGCCATCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPhe 80
DB 181 TGCCGGGGGATTTAGTGGTAAACCTTGACCTCACCTGCTCTCTGTATATGTTTC 240
QY 81 TyrGluLeuValThrGlyValTyrGluGlyTyrAsnPhePheCysGlnGlyThrArg 100
DB 241 TGTGAGTTAGTAACAGAGATATGGAAGCAATATCAATTTCTTCTGACAGGCACACGC 300
QY 101 SerAlaGlyIleSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIys 120
DB 301 ACCGACGAGAAATCAGATATGAAGATTATCCGTCCTGCTGCTGACTACTTCTCCAAA 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgIleAsnArgIleGlnIleThr 140
DB 361 CTCTAGATTTTATGACACTTTCTTCTTCTTCTGCGCAAGAACACACCATGATCGC 420
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
DB 421 GTCCTGACGCTACACCATGCTGCTGATGCAATCATCTGATGTTGTATGATGACG 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
DB 481 GTCCCTCGCGCCACTTATTTGGTGCCACCTTAATAGCTTATCCACGCTCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrPheSer 200
DB 541 TACTCTTACTATGTTGTGTCAGTCCCTTCCATGCCCTCATCTCTGCTGAGAAAG 600
QY 201 TyrIleThrGlnGlyLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
DB 601 TACATCACTCAGGCGGCGCTGCTTCACTTGTGCTGACATCATCAAGACAGCGCGCG 660
QY 221 ValPheTyrProCysSerPheProLeuGlyTyrPhePhePheGlnIleGlyTyrMetIle 240
DB 661 GTCTCTGCGCGGTCACATTCCTCTTGTGTTGTATTTCCAGATTGAGTACATTAT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleValIleSer 260
DB 721 TCCCTGATCTCTCTTCAAACTTCTACATTCACACTCAACACAGAAAGGGGCTCC 780
QY 261 ArgArgIleAspHisIleLeuIleGlnArgGlySerValAlaIleValAsnGlyHis 280
DB 781 CGAAGGAACACACCTGGAAGACACCGAAGAGGCTCCGTGCTGCTGATGATGACAC 840
QY 281 ThrAsnSerPheProSerLeuGlnAsnSerValIleProArgIleGlnArgIleAsp 299
DB 841 ACCAAGAGCTTTTACCCCTCGGAACAAATGTGAAGCCAGAGAACTCGGAGAGAT 897

RESULT 5
US-10-156-911-3

/ Sequence 3, Application US/10156911
/ Publication No. US20030163845A1

GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories

/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Leonard, Amanda Eun-Yeong

/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Pereira, Suzette L.

/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407 US, P4

/ CURRENT APPLICATION NUMBER: US/10/156,911
/ CURRENT FILING DATE: 2002-10-01

/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11

/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24

/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23

/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02

/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FastSeq for Windows Version 4.0

/ SEQ ID NO 3
/ LENGTH: 914
/ TYPE: DNA

/ ORGANISM: Homo sapiens
US-10-156-911-3

Alignment Scores:

Pred. No.: 2,4e-170 Length: 914
Score: 1558.00 Matches: 278
Percent Similarity: 97.32% Conservative: 13
Best Local Similarity: 92.98% Mismatches: 8
Query Match: 94.37% Indels: 0
Gaps: 0

US-09-624-670-64 (1-299) x US-10-156-911-3 (1-914)

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
DB 1 ATGGAACATTTTATGATGATCACTTAATCACTTAATCAAGCATTTGCTGAGCCCTCGAGAT 60
QY 21 ThrArgValIleGlyTyrPheLeuLeuAspSerThrIleProThrPheValCysSerVal 40
DB 61 ACTGAGTAAAGAGATGTTCTTCTGACAAATTATATCCACATTTATCTGCTCTGTC 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIleTyrMetLeuAsnArgIleGlnIleThr 140
DB 121 ATATATTACTTAATTGATGCTGGACCAAAATATACATGAGAAATAAACAGCCATCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPhe 80
DB 181 TGCCGGGGGATTTAGTGGTAAACCTTGACCTCACCTGCTCTCTGTATATGTTTC 240
QY 81 TyrGluLeuValThrGlyValTyrGluGlyTyrAsnPhePheCysGlnGlyThrArg 100
DB 241 TGTGAGTTAGTAACAGAGATATGGAAGCAATATCAATTTCTTCTGACAGGCACACGC 300
QY 101 SerAlaGlyIleSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIys 120
DB 301 ACCGACGAGAAATCAGATATGAAGATTATCCGTCCTGCTGCTGACTACTTCTCCAAA 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgIleAsnArgIleGlnIleThr 140
DB 361 CTCTAGATTTTATGACACTTTCTTCTTCTTCTGCGCAAGAACACACCATGATCGC 420
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
DB 421 GTCCTGACGCTACACCATGCTGCTGATGCAATCATCTGATGTTGTATGATGACG 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180


```

Db      1  GGCAAAATACAACTTCTTCTGTACGGGACACAGCACCGCAGAGAAATCAGATTAAGATT 60
Qy      110  ILNRYGVALNEUTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPT 120
Db      61  ATCCGGTCCCTCTGGTGGTACCTACTTCTCCAACTCATAGAAATTAATGACACTTTCTTC 120
Qy      130  PHEILEUUAIRGLYSANASNAHISGLINILETHVALLEUHHISVALTYHHISHIALATHR 140
Db      121  TTCATCTCTGGCAAGAACACACACACAGATCAGCGTCTCTGACCGTCTACACCATGCTCG 180
Qy      150  METLEUASNIETPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPT 160
Db      181  ATGTGTAACTCTGGTGGTGTGGTGAAGAATCTGGGTCCTCGCGCCACTTTATTATTTGGT 240
Qy      170  ALATHIRLEUASNSERPHELLEHSIVALLEUMETIYSERTYRTYRGLYLEUSERSERILE 180
Db      241  GCCACACTTAATAGCTTCATCCACCGTCCCTCATGTACTCTTACTAATAGTTTGTGCGTAC 300
Qy      190  PROSERMETKRGPROTYRTLEUTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPTPT 200
Db      301  CCTTCATAGGTGGTCCATACCTCTGTGTGAAGAAATATACATCACACAGGGCAGGTGGTGG 360
Qy      210  PHEVALLEUTHRIELLEIGHINTHRRHCYSGLYVALPHETPTPTPTPTPTPTPTPTPTPTPT 220
Db      361  TTTGTGCTGACATTCATCCACGACACACTCGGGGTGATATGGCCCTGACATTCCTCTTT 420
Qy      230  GLYTRPLEUPHEPHEGINILEGLIYTYRMETILESERLEUIALALEUPHETHRANPHE 240
Db      421  GGTGTGCTGTGATATTTCCAGATTGGATTCAGATTCATTCCTCATATGCTCTTTACAAACTTC 480
Qy      250  TYRILEGINTHIRYRANLISLYSGLYALASERARGLYLEASPHELEULEGLEYHIS 260
Db      481  TACTTTAGACCTTACCAACAAAGAAAGGGGCTCCCGAAGAAAGACACTGTAAGAGCACAC 540
Qy      270  GLASNGLYSERVALALALAVALAANGLYHISTHRANSERPHEPRCSERLEUGLASN 280
Db      541  CAGAAATGGGTCCATGGTGTGTGGAATGGACACACCAACAGCTTTTCAACCCCTGAAAAAC 600
Qy      290  SERVALYSPROARGLYSGINARGLYASAP 299
Db      601  AATGTGAAGCCAGAAAGAGCTGGGAAAGAT 630

RESULT 11
US-09-764-868-352
; Sequence 352, Application US/09764868
; Patent No. US20020168711a1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PT232
; CURRENT APPLICATION NUMBER: US/09/764,868
; PRIORITY FILING DATE: 2001-01-17
; Prior application data removed - refer to PAMM or file wrapper
; NUMBER OF SEQ ID NOS: 1510
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 352
; LENGTH: 748
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (702)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (721)
; OTHER INFORMATION: n equals a,t,g, or c
; US-09-764-868-352

```

Alignment Scores:	
pred. No.:	7.62e-114
Score:	1069.00
Percent Similarity:	98.48%
Best Local Similarity:	94.95%
Length:	748
Matches:	188
Conservative:	7
Mismatches:	3

Query Match:	64.75%	Indels:	0
DB:	9	Gaps:	0
US-09-624-670-64 (1-299) x US-09-764-866-352 (1-748)			

QY		107	ATGGAACATTTTGCATCATCACTTGTAGACTTATTTTCAGGACCTTGCGCCCTCGAGAT	160	MetGlnHispheAspIleaserLeuserSerThrTyrPheValAlaPheLeuGlyProArgAsp	20
DB		107	ATGGAACATTTTGCATCATCACTTGTAGACTTATTTTCAGGACCTTGCGCCCTCGAGAT	160		
QY		21	ThirArgValIleSGlyTyrPheLeuLeuAspHenyIleProThrPheValCysSerVal	40		
DB		167	ACRAGAGTAAAGAGATGGTTCTTCTCGGACATTTATATACCACTTATATCTGCTCTGTC	224	...	
QY		41	IleTyrLeuLeuIleValITrPheLeuGlyProIleTyrMetLysAsnArgGlnProPheSer	60		
DB		227	ATATATTTTCTATTTGTATGTATGGCTGGGACCCAAATTCATGAGGAAATMAACACCAATTCCT	280	...	
QY		61	CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe	80		
DB		287	TGCGGGGGGAGTTTTTAACTGGTGTGTATACCTTGACCTCACTGCTGTCTCTGTATATGTTC	340	...	
QY		81	TyrGluIleuValThrGlyValITrpgIuGlyLysTyrAsnPhePheCysGlnGlyThrArg	100		
DB		347	TGTGAGTTTGTATACAGAGATATGGGAGGCAATTCACACTTCTTGTGCAAGGCACAGC	400		
QY		101	SerAlaGlyGluSerAspMetLysIleIleArgValLeuITrPTrPTrTyrPheSerLys	120		
DB		407	ACCGCAGGAGAAATCAATATGAAAGATTAACCCCTGCTCGCTGGTGTACTTCTCCAA	460	...	
QY		121	LeuIleGluPheMetAspThrPhePhePheIleLeuArgLysAsnAsnHisGlnIleThr	140		
DB		467	CTATATGAATTTTGGACACTTCTTCTTCTTCATCTCGCGGAAAGAACACCAACCAAGATCACG	520		
QY		141	ValLeuHisValTyrHisHisAlaThrMetLeuAsnIleITrPTrPheValMetAsnITrP	160		
DB		527	GTCCTGACGTACACCAACATGCTCGTGAAGCTGAACATCTGGTGGTTGTGATGAACTGG	580	...	
QY		161	ValProCysGlyHisSerTyrPheGlyAlaITrPLeuAsnSerPheIleHisValLeuMet	180		
DB		587	GTCCTCGGGCCACCTTATTTTGGMGCAACACTTAATAGCTCATACAGCTCCTCATG	644		
QY		181	TyrSerTyrTyrGlyLeuSerSerIleProSerMetAspProLysTyrLeuITrPTr	198		
DB		647	TACTTTTACTATAGCTTTGTGTGAGTCCCTTTCATAGCTCCATACCTCTGGTGG	700	...	

```

RESULT 12
US-09-903-456-5
Sequence 5, Application US/09903456
Patent No. US20020138874A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407.US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
PRIORITY FILING DATE: 2001-07-11
PRIORITY APPLICATION NUMBER: US 09/624,670
PRIORITY FILING DATE: 2000-07-24
PRIORITY APPLICATION NUMBER: US 09/379,095
PRIORITY FILING DATE: 1999-08-23
PRIORITY APPLICATION NUMBER: US 09/445,826
PRIORITY FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 5
LENGTH: 879
TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-5

```


Alignment Scores:

Pred. No.:	1,056-100	Length:	879
Score:	956.50	Matches:	168
Percent Similarity:	71.58%	Conservative:	36
Best Local Similarity:	58.95%	Mismatches:	78
Query Match:	57.93%	Indels:	3
DB:	9	Gaps:	1

US-09-624-670-64 (1-299) x US-09-903-456-5 (1-879)

```

QY      1 MetGluHsphaeApalaseLeuSerThrTyRphelYsAlaPheLeuGlyProArgasp 20
DB      10 CTGAAGGCGCTTGAATGAAGTCAATGCTTCTTGACACAACATGTTGGACACAGAT 69
QY      21 ThrArgValysGlyTPRphelLeuAspAsnTyrLleProThrPheValCysSerVal 40
DB      70 TCTGAGTTCGGGGGTGCTCTGCTGAGCTTACCTTCCACCTTACCTCCACCATC 129
QY      41 IleTyRleuLeuLeuValTPRleuGlyProTyRtyrAsnPhelCysGlnGlyThrArg 60
DB      130 ACGTACGCTGCTGATGATGCTGGGTACAGATACATGAAGAAGAGCGCTGCTGCT 189
QY      61 CysArgGlyLleLeuGlnLeuTyRAsnLeuGlyLeuThrLeuSerLeuTyRMetPhe 80
DB      190 CTCAGGGGATCCTCACCCTTGATTAACCTCCGAATCACATCTTCTGCGATTAAGCTG 249
QY      81 TyRGlueuValThrGlyValTPRgluGlyLysTyRAsnPhelCysGlnGlyThrArg 100
DB      250 GTGAGGCTCATCTCTCCAGCTGGAGAGAGGTTAACTTGCGATGTCAGAAATCTCGAC 309
QY      101 SerAlaGlyGluSerAspMetLysLleLeuArgValLeuTPRTPRtyrPheSerLys 120
DB      310 AGTCAGAGAGAAAGTGAATGTCGGGTAGCCAAAGCTTTGGTGTACTACTCTCCAAA 369
QY      121 LeuLleGluPheMetAspThrPhePheLleLeuArgLysAsnAsnLsglnLleThr 140
DB      370 CTAGGAGATCTCCGAGACACATTTCTTGTGTAGAAAAGAACCAATCAGATCACC 429
QY      141 ValLeuHsValTyRHisAlaThrMetLeuAsnLleTPRTPRphelValMetAsnTPR 160
DB      430 TTCCTTCAATGCTATACACACGCGTCAATGTTCAACATCTGGTGTGTGTTGAATCG 489
QY      161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheLleHisValLeuMet 180
DB      490 ATACCTGTGTCAAAGCTCTTGTGACCCAGCCCTGAACAGCTTATCCACATTCATG 549
QY      181 TyRserTyRtyrGlyLeuSerSerLleProSerMetArgProTyRleuTPRTPRlys 200
DB      550 TACTCTTACTACGAGCTGTCTGTGTGTCCTCCGTCATGCAACAAGTCTTGTGTGAAGAG 609
QY      201 TyRleuThrGlnGlyGlnLeuValGlnPheValLeuThrLleLleGlnThrThrCysGly 220
DB      610 TACCTCACACAGGCTCAGCTGTGAGTTCGACTTCAACATCAGACACAGCTGAGTCC 669
QY      221 ValPheTPRProCysSerPheProLeuGlyTPRleuPhePheGlnLleGlyTyrMetLle 240
DB      670 GTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTCACTTCCAGCTTCCCTTAATGAGTG 729
QY      241 SerLeuLleAlaLeuPheThrAsnPhelTyrLleGlnThrTyRAsnLysGlyAlaSer 260
DB      730 AGCTGTGATCCTCTTCTTAACCTTCAATTCAGACATACCGAAGAAAGCCAGAGAG 789
QY      261 Arg-----ArgLysAspHisLeuLysGlyHisGlnLysGlySerValAlaAlaVal 277
DB      790 AAAGAGCTGCAAGAAAGAAAGTGAAGATGTTTCCCAAGCCCACTTAATTTGTGCT 849
QY      278 AsnGlyHisThrAsn 282
DB      850 AATGCAATGACGAC 864

```

RESULT 13
US-09-849-199A-22
; Sequence 22, Application US/09849199A

```

; Publication No. US20030082754A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Thurnmond, Jennifer M.
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 6804.US.01
; CURRENT APPLICATION NUMBER: US/09/849,199A
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 879
; TYPE: DNA
; ORGANISM: Mus musculus
; US-09-849-199A-22

Alignment Scores:
Pred. No.: 1,056-100
Score: 956.50
Percent Similarity: 71.58%
Best Local Similarity: 58.95%
Query Match: 57.93%
DB: 10
Gaps: 1

US-09-624-670-64 (1-299) x US-09-849-199A-22 (1-879)

QY      1 MetGluHsphaeApalaseLeuSerThrTyRphelYsAlaPheLeuGlyProArgasp 20
DB      10 CTGAAGGCGCTTGAATGAAGTCAATGCTTCTTGACACAACATGTTGGACACAGAT 69
QY      21 ThrArgValysGlyTPRphelLeuAspAsnTyrLleProThrPheValCysSerVal 40
DB      70 TCTGAGTTCGGGGGTGCTCTGCTGAGCTTACCTTCCACCTTACCTCCACCATC 129
QY      41 IleTyRleuLeuLeuValTPRleuGlyProTyRtyrAsnPhelCysGlnGlyThrArg 60
DB      130 ACGTACGCTGCTGATGATGCTGGGTACAGATACATGAAGAAGAGCGCTGCTGCT 189
QY      61 CysArgGlyLleLeuGlnLeuTyRAsnLeuGlyLeuThrLeuSerLeuTyRMetPhe 80
DB      190 CTCAGGGGATCCTCACCCTTGATTAACCTCCGAATCACATCTTCTGCGATTAAGCTG 249
QY      81 TyRGlueuValThrGlyValTPRgluGlyLysTyRAsnPhelCysGlnGlyThrArg 100
DB      250 GTGAGGCTCATCTCTCCAGCTGGAGAGAGGTTAACTTGCGATGTCAGAAATCTCGAC 309
QY      101 SerAlaGlyGluSerAspMetLysLleLeuArgValLeuTPRTPRtyrPheSerLys 120
DB      310 AGTCAGAGAGAAAGTGAATGTCGGGTAGCCAAAGCTTTGGTGTACTACTCTCCAAA 369
QY      121 LeuLleGluPheMetAspThrPhePheLleLeuArgLysAsnAsnLsglnLleThr 140
DB      370 CTAGGAGATCTCCGAGACACATTTCTTGTGTAGAAAAGAACCAATCAGATCACC 429
QY      141 ValLeuHsValTyRHisAlaThrMetLeuAsnLleTPRTPRphelValMetAsnTPR 160
DB      430 TTCCTTCAATGCTATACACACGCGTCAATGTTCAACATCTGGTGTGTGTTGAATCG 489
QY      161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheLleHisValLeuMet 180
DB      490 ATACCTGTGTCAAAGCTCTTGTGACCCAGCCCTGAACAGCTTATCCACATTCATG 549
QY      181 TyRserTyRtyrGlyLeuSerSerLleProSerMetArgProTyRleuTPRTPRlys 200
DB      550 TACTCTTACTACGAGCTGTCTGTGTGTCCTCCGTCATGCAACAAGTCTTGTGTGAAGAG 609
QY      201 TyRleuThrGlnGlyGlnLeuValGlnPheValLeuThrLleLleGlnThrThrCysGly 220
DB      610 TACCTCACACAGGCTCAGCTGTGAGTTCGACTTCAACATCAGACACAGCTGAGTCC 669

```

```

QY 221 ValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMetIle 240
Db 670 GTGTGAAGCCCTGTGAGCTTCCTCCCTTGGCTGTTCATCTTCACATCTCTCTTAATATGATG 729
QY 241 SerLeuIleAlaLeuPheThrAsnPhetYrIleGlnThrTyrAsnIleValSer 260
Db 730 ACCGTGTCATCTGTTCTTAATCTTATATTCAGACATACCGGAAAAAGCCAGTGAG 789
QY 261 Arg-----ArgIleAspHisLeuIleValIleGlnAsnGlySerValAlaVal 277
Db 790 AAAGAGCTGCACAGAAAGAAAGTGAAGATGGTTTCCCAAGCCCACTTAATTGTGGCT 849
QY 278 AsnGlyHisThrAsn 282
Db 850 AATGGCATGACGGAC 864

RESULT 14
US-10-120-637A-22
/ Sequence 22, Application US/10120637A
/ Publication No. US20030134400A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Hammond, Jennifer M.
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Das, Tapas
/ APPLICANT: Leonard, Amanda E.
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
/ FILE REFERENCE: 6804, US, P1
/ CURRENT APPLICATION NUMBER: US/10/120,637A
/ PRIOR FILING DATE: 2002-04-11
/ PRIOR APPLICATION NUMBER: US 09/849,199
/ PRIOR FILING DATE: 2001-05-04
/ NUMBER OF SEQ ID NOS: 73
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 22
/ LENGTH: 879
/ TYPE: DNA
/ ORGANISM: Mus musculus
US-10-120-637A-22

Alignment Scores:
Pred. No.: 1,05e-100 Length: 879
Score: 956.50 Matches: 168
Percent Similarity: 71.58 Conservative: 36
Best Local Similarity: 58.954 Mismatches: 78
Query Match: 57.934 Indels: 3
DB: 14 Gaps: 1

US-09-624-670-64 (1-299) x US-10-120-637A-22 (1-879)
QY 1 MetGlnHisPheAspLaserUserThrTyrPheIleAlaPheLeuGlyProArgAsp 20
Db 10 CTGAAGGCTTGTATATGAATCATGTTCTTGGACACATGTTGGACCGAGAT 69
QY 21 ThrArgValIleGlyTrpPheLeuLeuPheAsnTyrIleProThrPheValCysSerVal 40
Db 70 TCTCGAGTTCGGCGGGGTCTCTGCTGACCTTCACTTCCACCTTCATCTCAACATC 129
QY 41 IleTyrLeuLeuIleValTrpLeuGlyProIleTyrMetIleAsnArgGlnProPheSer 60
Db 130 ACCTACCTGCTCTCGATATGCTGGGTAAAGTACATGAAAGAAAGGCTGCTGTGCT 189
QY 61 CysArgGlyIleLeuGlnIleuTyrAsnLeuGlyLeuThrIleLeuSerLeuTyrMetPhe 80
Db 190 CTCAGGGGATCTCTCACTGTATATACCTCGCAATCACACTTCTTTCGCTATATCTG 249
QY 81 TyrGlnLeuValThrGlyValTrpGlnGlyIleTyrAsnPhePheCysGlnGlyThrArg 100
Db 250 GTGAGCTCATCTCTCCAGCTGGAGAGGATTCACAACTTGACAGTGCAGATCTCGAC 309

```

```

QY 101 SerAlaGlyIleUserAspMetIleIleAlaGlyAlaLeuTrpTyrTyrPheSerIys 120
Db 310 AGTGAAGAGAGAGGTGATGCCGTCCGGTACCGCAAGGTCTTGAGGTGATCTACTTCCAAA 369
QY 121 LeuIleGlnPheMetAspThrPhePhePheIleuArgIleAsnAsnHisGlnIleThr 140
Db 370 CTAGTGAAGTTCCTGGAACAGATTTCTTGTCTTACGAAAAAGAACCATTCAGATACC 429
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTrpTrpPheValMetAsnTrp 160
Db 430 TTCCTCATGTCTTACACACAGCGCTCATGTTCACATCTGCTGCTGTGTAAGTGG 489
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db 490 ATACCTTGTGTGCAAGCTTCTTGGACCCACCTGAACAGCTTATCCACATTCATCAG 549
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTrpTrpIleVal 200
Db 550 TACTCTTACTACGGGCTGTGTGTCTCCCGTCCATGCACAAGTACCTTTGTGTGAAGAG 609
QY 201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrTrpCysGly 220
Db 610 TACCTCACAGGCTCACTGTGTGAGTGTGACTCACCAACACGACACAGCTGAGTCC 669
QY 221 ValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMetIle 240
Db 670 GTGTGAAGCCCTGTGAGCTTCCTCCCTTGGCTGTCTATCTTCAGTCTTCTCTATATGATG 729
QY 241 SerLeuIleAlaLeuPheThrAsnPhetYrIleGlnThrTyrAsnIleValSer 260
Db 730 ACCGTGTCATCTGTTCTTAATCTTATATTCAGACATACCGGAAAAAGCCAGTGAG 789
QY 261 Arg-----ArgIleAspHisLeuIleValIleGlnAsnGlySerValAlaVal 277
Db 790 AAAGAGCTGCACAGAAAGAAAGTGAAGATGGTTTCCCAAGCCCACTTAATTGTGGCT 849
QY 278 AsnGlyHisThrAsn 282
Db 850 AATGGCATGACGGAC 864

RESULT 15
US-10-156-911-5
/ Sequence 5, Application US/10156911
/ Publication No. US20030163845A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407, US, P4
/ CURRENT APPLICATION NUMBER: US/10/156,911
/ PRIOR FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 5
/ LENGTH: 879
/ TYPE: DNA
/ ORGANISM: Mus musculus
US-10-156-911-5

Alignment Scores:
Pred. No.: 1,05e-100 Length: 879

```

Score: 956.50 Matches: 169
 Percent Similarity: 71.58% Conservative: 36
 Best Local Similarity: 58.95% Mismatches: 78
 Query Match: 57.93% Indels: 3
 DB: 14 Gaps: 1

US-09-624-670-64 (1-299) x US-10-156-911-5 (1-879)

```

QY      1 MetGIuH:SPheASPAlaserLeuSerThrTyrPheValalaphelLeuGlyProAArgAap 20
DB      10 CTGAAGGCGCTTGTATATGAAGTCAATGCTTTCTTGACACAACATGTTTGACACAGAGAT 69
QY      21 ThrArgValIysGlyTyrPheLeuLeuASPasnTyrIleProThrPheValCysSerVal 40
DB      70 TCTCGAGTTCGCGGGTGTCTCGCTGAGACTTACCTTCCACCTTCATCCTCAGCACCATC 129
QY      41 IleTyrLeuLeuIleValIlePheLeuGlyProIleTyrMetIleAsnArgGlnProPheSer 60
DB      130 ACGTACCTGCTCTCGATATGCTGGGTAAACAGTACATGAAGAACAGGCGCTGCTGTCT 189
QY      61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
DB      190 CTCAGGGGCGATCTCAGCTTGTATACCTCGAATACACACTTCTTCTGCGTATATGCTG 249
QY      81 TyrGluLeuValThrGlyValTyrGluGlyIleTyrAsnPhePheCysGlnGlyThrArg 100
DB      250 GTGAGGCTCATCTCTCCAGCTGGGAGAGGTAACTTCAGTGCAGTGTCAAGATCTCGAC 309
QY      101 SerAlaGlyGlnSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIle 120
DB      310 AGTCAGAGAGAGAGTATGTCGGGTAGCCAGAGCTTGTGGGTACTACTTCTCCAAA 369
QY      121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgIleAsnAsnIleGlnIleThr 140
DB      370 CTAGTGAAGTCCCTGACACAGATTTCTTGTCTTACGAAAAAGACCAATCAGATCAC 429
QY      141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
DB      430 TTCTTCATGCTATACCAAGCGCTCATGTTCAACATCTGGGTGTGTGTGAACTGG 489
QY      161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
DB      490 ATACCTGTGGTCAAAAGCTTCTTGGACCAACCTGACAGCTTTATCCACATCTCATG 549
QY      181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrIle 200
DB      550 TACTCTACTACAGGCTGTCTGTGTCTCCCTCCATGACACAGTACCTTGTGGAGAAAG 609
QY      201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
DB      610 TACCTCACACAGGCTCAGCTGTGTGACAGTTGTACTCACATCCAGCACACGCTGAGTGCC 669
QY      221 ValPheTyrProCysSerPheProLeuGlyTyrPhePhePheGlnIleGlyTyrMetIle 240
DB      670 GTGGTGAAGCGCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTTCCATATGATG 729
QY      241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleGlyValAsnSer 260
DB      730 ACGCTGTGATCCCTGTTCTTAACCTTCAATTCAGACATACCGAAAAAGCCAGTGAAG 789
QY      261 Arg-----ArgIleAspHisLeuIleGlyHisGlnAsnGlySerValAlaIleVal 277
DB      790 AAAGAGCTGCAAGAGAAAGAGAGAAATGTTTCCCAAGGCCACCTTAATGTGGCT 849
QY      278 AsnGlyHisThrAsn 282
DB      850 AATGGCATGACGGAC 864

```

Search completed: April 1, 2004, 13:05:00
 Job time : 400.655 secs

Db 61 ACAAGAGTCAAGAGATGTTCTCTGGAACAATTCATCCCTAGCTTGTGTCTGTT 120
 Qy 121 ATTACTTACTCAATGATGATGCTGGAGCAAAAATACATGAAACCGGACCGCTTCT 180
 Db 121 ATTACTTACTCAATGATGATGCTGGAGCAAAAATACATGAAACCGGACCGCTTCT 180
 Qy 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAATCAACCGCTGCTCTCTCAATGTC 240
 Db 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAATCAACCGCTGCTCTCTCAATGTC 240
 Qy 241 TATGAGTTGCTGACAGGTGTGTGGAGGGCAAAATACATTTTCTGCAAGGAAACAGC 300
 Db 241 TATGAGTTGCTGACAGGTGTGTGGAGGGCAAAATACATTTTCTGCAAGGAAACAGC 300
 Qy 301 AGCGCGGAGAAATCCGATATGAATATCCCGCTCTCTGCTGCTACTACTTCTCCAA 360
 Db 301 AGCGCGGAGAAATCCGATATGAATATCCCGCTCTCTGCTGCTACTACTTCTCCAA 360
 Qy 361 CTGATGAAATTCATGACACCTTTTCTTCACTCTTCCGAAACACACCAATCACC 420
 Db 361 CTGATGAAATTCATGACACCTTTTCTTCACTCTTCCGAAACACACCAATCACC 420
 Qy 421 GTGCTCATGTCTACCAACAGCTTACATGCTCAACATCTGCTGTTGTATGAATCG 480
 Db 421 GTGCTCATGTCTACCAACAGCTTACATGCTCAACATCTGCTGTTGTATGAATCG 480
 Qy 481 GTTCCCTGGGCAATTCATATTTTGTGTGGACATCAAGCTTCACTCATGCTCTCATG 540
 Db 481 GTTCCCTGGGCAATTCATATTTTGTGTGGACATCAAGCTTCACTCATGCTCTCATG 540
 Qy 541 TACTGTAATGATGCTGTCTCTCTCATCCGCTCATGCTGCTCTCTGCTGCTGAAAG 600
 Db 541 TACTGTAATGATGCTGTCTCTCTCATCCGCTCATGCTGCTGCTCTCTGCTGCTGAAAG 600
 Qy 601 TACATCACTCAAGGAGAGCTGTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 Db 601 TACATCACTCAAGGAGAGCTGTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 Qy 661 GTCTTCTGGCCATGCTCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
 Db 661 GTCTTCTGGCCATGCTCTCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCT 720
 Qy 721 TCCCTGATTTGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780
 Db 721 TCCCTGATTTGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780
 Qy 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGGCCGCTCAACGACAC 840
 Db 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGGCCGCTCAACGACAC 840
 Qy 841 ACCAAGAGCTTCCCTTCTCTGAAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900
 Db 841 ACCAAGAGCTTCCCTTCTCTGAAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900

RESULT 2
 US-10-156-911-6
 ; Sequence 6, Application US/10156911
 ; Publication No. US20030163845A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Mukerji, Pradipt
 ; APPLICANT: Abbot Laboratories
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407, US, P4
 ; CURRENT APPLICATION NUMBER: US/10/156, 911
 ; PRIOR FILING DATE: 2002-10-01
 ; PRIOR APPLICATION NUMBER: US 09/903,456
 ; PRIOR FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24

; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1998-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 122
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 6
 ; LENGTH: 900
 ; TYPE: DNA
 ; ORGANISM: Mus musculus
 ; US-10-156-911-6
 Query Match 100.0%; Score 900; DB 14; Length 900;
 Best Local Similarity 100.0%; Pred. No. 2,5e-287;
 Matches 900; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 ATGGAACATTTGATGATGCTCACTCACTGATCTTCAAGGCTTCTGCGCCCGGAGAT 60
 Db 1 ATGGAACATTTGATGATGCTCACTCACTGATCTTCAAGGCTTCTGCGCCCGGAGAT 60
 Qy 61 ACAAGAGTCAAGAGATGTTCTCTGGAACAATTCATCCCTAGCTTGTGTCTGTT 120
 Db 61 ACAAGAGTCAAGAGATGTTCTCTGGAACAATTCATCCCTAGCTTGTGTCTGTT 120
 Qy 121 ATTACTTACTCAATGATGATGCTGGAGCAAAAATACATGAAACCGGACCGCTTCT 180
 Db 121 ATTACTTACTCAATGATGATGCTGGAGCAAAAATACATGAAACCGGACCGCTTCT 180
 Qy 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAATCAACCGCTGCTCTCTCAATGTC 240
 Db 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAATCAACCGCTGCTCTCTCAATGTC 240
 Qy 241 TATGAGTTGCTGACAGGTGTGTGGAGGGCAAAATACATTTTCTGCAAGGAAACAGC 300
 Db 241 TATGAGTTGCTGACAGGTGTGTGGAGGGCAAAATACATTTTCTGCAAGGAAACAGC 300
 Qy 301 AGCGCGGAGAAATCCGATATGAATATCCCGCTCTCTGCTGCTACTACTTCTCCAA 360
 Db 301 AGCGCGGAGAAATCCGATATGAATATCCCGCTCTCTGCTGCTACTACTTCTCCAA 360
 Qy 361 CTGATGAAATTCATGACACCTTTTCTTCACTCTTCCGAAACACACCAATCACC 420
 Db 361 CTGATGAAATTCATGACACCTTTTCTTCACTCTTCCGAAACACACCAATCACC 420
 Qy 421 GTGCTCATGTCTACCAACAGCTTACATGCTCAACATCTGCTGTTGTATGAATCG 480
 Db 421 GTGCTCATGTCTACCAACAGCTTACATGCTCAACATCTGCTGTTGTATGAATCG 480
 Qy 481 GTTCCCTGGGCAATTCATATTTTGTGTGGACATCAAGCTTCACTCATGCTCTCATG 540
 Db 481 GTTCCCTGGGCAATTCATATTTTGTGTGGACATCAAGCTTCACTCATGCTCTCATG 540
 Qy 541 TACTGTAATGATGCTGTCTCTCTCTCATCCGCTCATGCTGCTCTCTGCTGCTGAAAG 600
 Db 541 TACTGTAATGATGCTGTCTCTCTCTCATCCGCTCATGCTGCTCTCTGCTGCTGAAAG 600
 Qy 601 TACATCACTCAAGGAGAGCTGTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 Db 601 TACATCACTCAAGGAGAGCTGTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 Qy 661 GTCTTCTGGCCATGCTCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
 Db 661 GTCTTCTGGCCATGCTCTCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCT 720
 Qy 721 TCCCTGATTTGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780
 Db 721 TCCCTGATTTGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780
 Qy 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGGCCGCTCAACGACAC 840
 Db 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGGCCGCTCAACGACAC 840
 Qy 841 ACCAAGAGCTTCCCTTCTCTGAAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900

Db 841 ACCAAGCCTTCCCTTCCCTGGAAAAACAGCTGAAGCCAGAGGACGGAAGATTGA 900

RESULT 3
US-09-903-456-3
Sequence 3, Application US/09903456
Patent No. US20020138874A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradiip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407.US.P3
CURRENT APPLICATION NUMBER: US/09/903.456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 3
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-09-903-456-3

Query Match 79.6%; Score 716; DB 9; Length 914;
Best Local Similarity 87.2%; Pred. No. 2.7e-226;
Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

Qy 1 ATGGAACATTCGATGCGTCACTCACTGATCTATTTCAGGCCCTCTCGGCCCCGAGAT 60
Db 1 ATGGAACATTTGATGATCACTAAGTAACTATTTCAGGCCATTTGATGAGCCCTGAGAT 60
Qy 61 ACAAGAGTCMAAGAGTGGTTCCTCTCTGCAATTAACCTCTACGTTTGTCTGTCT 120
Db 61 ACTAGAGTAAAGAGATGGTTCCTCTCTGCAATTAATACCCACATTTATCTGCTCTGTC 120
Qy 121 ATTACTTACTCATTTGATGCGTCACTCACTGATCTATTTCAGGCCCTCTCTCT 180
Db 121 ATATATTTACTAATTTGATGCGTCACTCACTGATCTATTTCAGGCCCTCTCTCT 180
Qy 181 TGCCGAGGCATCTGCAAGTGTATACCTTGAACCTCACTGCTGTCTCTATCATGTT 240
Db 181 TGCCGAGGATTTTATGAGTGTATACCTTGAACCTCACTGCTGTCTCTATATATGTT 240
Qy 241 TATAGTTGTGAGAGGTGTGTGGAGGCAATATACATTTTTCGCAAGGAAACAGC 300
Db 241 TGTAGTTAGTAAAGAGATGAGGAAAGCAATATACATTTTCTTGTGAGGACACGC 300
Qy 301 AGCCGAGGAGATCCGATATGATGATCATCCGCGCTCTGTGTGATCACTTCTCCAA 360
Db 301 ACCGAGGAGATCAGATATGATGATATCCGCTCTGTGTGATCACTTCTCCAA 360
Qy 361 CTATATGATTTGATGAGACCTTTTCTTCACTCTTGGCAAGAAACCAACCAAGATC 420
Db 361 CTATATGATTTTATGAGACCTTTTCTTCACTCTTGGCAAGAAACCAACCAAGATC 420
Qy 421 GTGTCATGTCTACCAAGAGTACATGCTCAACATCGTGTGTGTGATGAACTG 480
Db 421 GTCTGACAGCTCTACCAAGAGTACATGCTCAACATCGTGTGTGTGATGAACTG 480
Qy 481 GTTCCCTGGGCGCATTAATTTTGTGGAGCACTCAACAGCTTCAATCATGTCTCAG 540
Db 481 GTCCCTGGGCGCATTAATTTTGTGGAGCACTTAATAGCTTCAATCATGTCTCAG 540
Qy 541 TACTGATATGATGTGTCTCTCATCCGTCATGAGTCCATCTGTGTGAAAAAG 600

Db 541 TACTTCTATGATGTTGTGTGATGCTCTTCAAGCGTCACTACTCTGTGTGAAGAG 600
Qy 601 TACATCACTCAAGGAGAGTGTCACTGTTGTGTGATGATCAATCAACAGCCTGCGG 660
Db 601 TACATCACTCAAGGAGAGTGTCACTGTTGTGTGATGATCAATCAACAGCCTGCGG 660
Qy 661 GTCTTGTGGCAAGCTCTTCCCTCTCGGAGTGTGTCTTCCAGTTGGAATGAT 720
Db 661 GTATCTGGCGGTCACATCTTCCCTCTGTGTGTGTATTTCCAGTTGGAATGAT 720
Qy 721 TCCCTGATGCTCTCTTCAAACTCTTCACTTCAAGCTTCAACAGAAAGGCGCTCT 780
Db 721 TCCCTGATGCTCTCTTCAAACTCTTCACTTCAAGCTTCAACAGAAAGGCGCTCT 780
Qy 781 CGAGGAAAGACCACTGAAAGGCGCACAGAAAGGCTGTGTGCGCGCTCAAGCAC 840
Db 781 CGAAGGAAAGACCACTGAAAGGCGCACAGAAAGGCTGTGTGCGCGCTCAAGCAC 840
Qy 841 ACCAAGCCTTCCCTTCCCTGGAAAAACAGCGTGAAGCCAGAGAGAGGAAGATTGA 900
Db 841 ACCAAGCCTTTTACCCCTGGAAAAACATGTGAAGCCAGGAAGCTCGGAAGATTGA 900

RESULT 4
US-09-769-863-21
Sequence 21, Application US/09769863
Publication No. US20030157144A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradiip
APPLICANT: Huang, Yung-Sheng
APPLICANT: Das, Tapas
APPLICANT: Thurmond, Jennifer
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
FILE REFERENCE: 6763.US.O1
CURRENT APPLICATION NUMBER: US/09/769,863
CURRENT FILING DATE: 2001-01-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 21
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-09-769-863-21

Query Match 79.6%; Score 716; DB 10; Length 914;
Best Local Similarity 87.2%; Pred. No. 2.7e-226;
Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

Qy 1 ATGGAACATTCGATGCGTCACTCACTGATCTATTTCAGGCCCTCTCGGCCCCGAGAT 60
Db 1 ATGGAACATTTGATGATCACTAAGTAACTATTTCAGGCCATTTGATGAGCCCTGAGAT 60
Qy 61 ACAAGAGTCMAAGAGTGGTTCCTCTCTGCAATTAACCTCTACGTTTGTCTGTCT 120
Db 61 ACTAGAGTAAAGAGATGGTTCCTCTCTGCAATTAATACCCACATTTATCTGCTCTGTC 120
Qy 121 ATTACTTACTCATTTGATGCGTCACTCACTGATCTATTTCAGGCCCTCTCTCT 180
Db 121 ATATATTTACTAATTTGATGCGTCACTCACTGATCTATTTCAGGCCCTCTCTCT 180
Qy 181 TGCCGAGGCATCTGCAAGTGTATACCTTGAACCTCACTGCTGTCTCTATCATGTT 240
Db 181 TGCCGAGGATTTTATGAGTGTATACCTTGAACCTCACTGCTGTCTCTATATATGTT 240
Qy 241 TATAGTTGTGAGAGGTGTGTGGAGGCAATATACATTTTTCGCAAGGAAACAGC 300
Db 241 TGTAGTTAGTAAAGAGATGAGGAAAGCAATATACATTTTCTTGTGAGGACACGC 300
Qy 301 AGCCGAGGAGATCCGATATGATGATCATCCGCGCTCTGTGTGATCACTTCTCCAA 360

Db 301 ACCGAGAGAAATCAGATATGAAGATTATCCGTGCTCTGAGTGTAATCTTCTCCAAA 360
 QY CTCATCGAATTCATGGACACCTTTTCTTCATCTCTCCGAAGAACCAACACAGATCAC 420
 Db 361 CTCATGAAATTTATGACACTTCTTCTTCATCTCTCCGAAGAACCAACACAGATCAC 420
 QY 421 GTGCTCATGTCTACACACAGCTACATCTCAACATCTGATGTTGTGATGAAGTGG 480
 Db 421 GTCTCAGACGTACACACATGCTGATGTAACATCTGATGTTGTGATGAAGTGG 480
 QY 481 GTTCCCTGGGCAATCATATTTGTGACACATCAACAGCTTCAATCAAGTCTCATG 540
 Db 481 GTTCCCTGGGCAATCATATTTGTGACACATCAACAGCTTCAATCAAGTCTCATG 540
 QY 541 TACTCGTACTATGTCTGCTCCATCCCTGATCCGTCATCCCTGATCCCTGATGAAAG 600
 Db 541 TACTCGTACTATGTCTGCTCCATCCCTGATCCGTCATCCCTGATCCCTGATGAAAG 600
 QY 601 TACATCACTCAAGGAGGAGCTGCTGATTTGTGCTGACATCATTCAGACGACTGCGGG 660
 Db 601 TACATCACTCAAGGAGGAGCTGCTGATTTGTGCTGACATCATTCAGACGACTGCGGG 660
 QY 661 GTTCTCGGCAATGCTCTCCCTCCCTCGGAGTGGCTGCTTCCAGATTGATGATGATT 720
 Db 661 GTTCTCGGCAATGCTCTCCCTCCCTCGGAGTGGCTGCTTCCAGATTGATGATGATT 720
 QY 721 TCCCTGATGCTCTCTTCACAACTTCTACATTCAGACTTCAACACAGAAAGGGGCTCT 780
 Db 721 TCCCTGATGCTCTCTTCACAACTTCTACATTCAGACTTCAACACAGAAAGGGGCTCT 780
 QY 781 CGAGAGAAAGACCACTGAAAGGGCCACGAGACGGGTCTGTGGCCGCTGTAAGACAC 840
 Db 781 CGAGAGAAAGACCACTGAAAGGGCCACGAGACGGGTCTGTGGCCGCTGTAAGACAC 840
 QY 841 ACCAAGAGCTTCCCTTCCCTGAAAAACAGCTGAAAGCCAGAAAGCAAGAAAGATTGA 900
 Db 841 ACCAAGAGCTTTCACCCCTGAAAAACATGTGAAGCAAGAAAGCTGCGAAGATTGA 900

RESULT 5
 US-10-156-911-3
 ; Sequence 3, Application US/10156911
 ; Publication No. US2003016345A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P4
 ; CURRENT APPLICATION NUMBER: US/10/156,911
 ; CURRENT FILING DATE: 2002-10-01
 ; PRIOR APPLICATION NUMBER: US 09/903,456
 ; PRIOR FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 122
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 914
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-10-156-911-3

Query Match 79.6%; Score 716; DB 14; Length 914;
 Best Local Similarity 87.2%; Pred. No. 2,7e-226;
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGGAACATTTGATGCTCACTACAGTACCTATTTCAAGGCTTCTCGGCCCCGAGAT 60
 Db 1 ATGGAACATTTGATGATGATCACTTAGTACCTATTTCAAGGCAATGTGAGCCCTCGAGAT 60
 QY 61 ACAAAGTCAAGAGATGCTTCTCTGACAAATTACATCCCTACGTTTGTCTGTCTGT 120
 Db 61 ACTAAGTAAAGATGCTTCTCTGACAAATTATATACCATTTATCTGCTCTGTCT 120
 QY 121 ATTACTACTCATTTGATGCTGGAGCAAAATACATGAAGAACCGGACGCTTCTCT 180
 Db 121 AATATTTACTAATTTGATGCTGGAGCAAAATACATGAAGAAATACGCAATTCCT 180
 QY 181 TGCCGAGCAATCTGCACTGTATTAACCTTGAACCTCACTGCTGCTCTGTATATGTT 240
 Db 181 TGCCGAGCAATCTGCACTGTATTAACCTTGAACCTCACTGCTGCTCTGTATATGTT 240
 QY 241 TATGATGTTGATGACAGGTGTGAGGAGGCAAAATACAACTTTTCTGCGAGGAAACG 300
 Db 241 TGTGATTTAGTACAGAGGTATGAGAAAGCAATTAACATTTCTTCTGCGAGGACAG 300
 QY 301 ACGCGGAGAAATCGATATGAAATCATCCGCTCTCTGTGTGTATCTAATTTCCAAA 360
 Db 301 ACCGAGAGAAATCAGATATGAAGATTATCCGTGCTCTGAGTGTAATCTTCTCCAAA 360
 QY 361 CTCATCAATTCATGACACCTTTTCTTCATCTCTTCCGAAGAACCAACAGATCAC 420
 Db 361 CTCATCAATTCATGACACCTTTTCTTCATCTCTTCCGAAGAACCAACAGATCAC 420
 QY 421 GTGCTCAATGTCTACACACAGTACATGCTCAACATCTGATGTTGTGATGAAGTGG 480
 Db 421 GTGCTCAATGTCTACACACAGTACATGCTCAACATCTGATGTTGTGATGAAGTGG 480
 QY 481 GTTCCCTGGGCAATGCTCTCCCTCCCTCGGAGTGGCTGCTTCCAGATTGATGATGATT 540
 Db 481 GTTCCCTGGGCAATGCTCTCCCTCCCTCGGAGTGGCTGCTTCCAGATTGATGATGATT 540
 QY 541 TACTGTAATGATGCTGCTCCCTCATCCGTCATGCTGCTGCTGCTGCTGCTGCTGCT 600
 Db 541 TACTGTAATGATGCTGCTCCCTCATCCGTCATGCTGCTGCTGCTGCTGCTGCTGCT 600
 QY 541 TACTGTAATGATGCTGCTCCCTCATCCGTCATGCTGCTGCTGCTGCTGCTGCTGCT 600
 Db 541 TACTGTAATGATGCTGCTCCCTCATCCGTCATGCTGCTGCTGCTGCTGCTGCTGCT 600
 QY 601 TACATCACTCAAGGAGGAGCTGCTGATTTGTGCTGACATCATTCAGACGACTGCGGG 660
 Db 601 TACATCACTCAAGGAGGAGCTGCTGATTTGTGCTGACATCATTCAGACGACTGCGGG 660
 QY 661 GTTCTCGGCAATGCTCTCCCTCCCTCGGAGTGGCTGCTTCCAGATTGATGATGATT 720
 Db 661 GTTCTCGGCAATGCTCTCCCTCCCTCGGAGTGGCTGCTTCCAGATTGATGATGATT 720
 QY 721 TCCCTGATGCTCTCTTCACAACTTCTACATTCAGACTTCAACACAGAAAGGGGCTCT 780
 Db 721 TCCCTGATGCTCTCTTCACAACTTCTACATTCAGACTTCAACACAGAAAGGGGCTCT 780
 QY 781 CGAGAGAAAGACCACTGAAAGGGCCACGAGACGGGTCTGTGGCCGCTGTAAGACAC 840
 Db 781 CGAGAGAAAGACCACTGAAAGGGCCACGAGACGGGTCTGTGGCCGCTGTAAGACAC 840
 QY 841 ACCAAGAGCTTCCCTTCCCTGAAAAACAGCTGAAAGCCAGAAAGCAAGAAAGATTGA 900
 Db 841 ACCAAGAGCTTTCACCCCTGAAAAACATGTGAAGCAAGAAAGCTGCGAAGATTGA 900

RESULT 6
 US-10-054-534B-21
 ; Sequence 21, Application US/10054534B
 ; Publication No. US20030167525A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Das, Tapas
 ; APPLICANT: Thurmond, Jennifer M.
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

FILE REFERENCE: 6763.US.P1
 CURRENT APPLICATION NUMBER: US/10/054,534B
 CURRENT FILING DATE: 2002-01-22
 PRIOR APPLICATION NUMBER: US 09/769,863
 PRIOR FILING DATE: 2001-01-25
 NUMBER OF SEQ ID NOS: 55
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 2:
 LENGTH: 914
 TYPE: DNA
 ORGANISM: Homo sapiens
 US-10-054-534B-21

Query Match 79.6%; Score 716; DB 14; Length 914;
 Best Local Similarity 87.2%; Pred. No. 2,7e-226;
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60
 DB 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60
 QY 61 ACAAGAGTCAAGAGTGTCTCCCTGAGCAATTCATCCCTAGCTTTGTCGTCTGTT 120
 DB 61 ACTAGAGTAAAGAGTGTCTCTTCTGAGCAATTCATCCCTAGCTTTGTCGTCTGTT 120
 QY 121 ATTACTTACTCTATGCTGAGGACCAAAATACATGAGAACCGGACGCGTCTCT 180
 DB 121 ATATATTACTATATTGATGCTGGAGACCAAAATACATGAGAACCGGACGCGTCTCT 180
 QY 181 TGGCGAGGACATCCTGCACTGTATTAACCTTGGATCAACCTCTCTCTCTACATGTT 240
 DB 181 TGGCGAGGATTTTATGTGTATTAACCTTGGATCAACCTCTCTCTCTCTATATGTT 240
 QY 241 TATGAGTGTGTGACAGTGTGTGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACGC 300
 DB 241 TGTGAGTGTGTGACAGGATGTGTGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACGC 300
 QY 301 AGCGGAGAGATCCGATATGAAGATCCGCGCTCTGCTGTGTAATCTTCTCAAA 360
 DB 301 ACCGAGAGAGATCCGATATGAAGATTCGCGCTCTGCTGTGTAATCTTCTCAAA 360
 QY 361 CTGATGGAATTCATGAGACCTTTCTTCTTCTGCAATTCCTGCAAGAACCAACGAGTACC 420
 DB 361 CTGATGGAATTTATGAGACCTTTCTTCTTCTGCAATTCCTGCAAGAACCAACGAGTACC 420
 QY 421 GTGCTCCATGTCTACCAACGAGTACCATGCTCAACATCTGTGTGTGTGTGAATGG 480
 DB 421 GTGCTGACGTCTACCAACGAGTACCATGCTCAACATCTGTGTGTGTGTGAATGG 480
 QY 481 GTTCCCTGGGCGCATTCATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
 DB 481 GTTCCCTGGGCGCATTCATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
 QY 541 TACTGTAATGATGTCCTGCTCCATCCGTCATCCGTCATCCGTCATCCGTCATCCGTCAT 600
 DB 541 TACTGTAATGATGTCCTGCTCCATCCGTCATCCGTCATCCGTCATCCGTCATCCGTCAT 600
 QY 601 TACATCACTCAAGGCGAGCTGTCTCAAGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
 DB 601 TACATCACTCAAGGCGAGCTGTCTCAAGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
 QY 661 GTCTTGTGGCGATGCTCTTCCCTCGGAGTGGCTGTCTTCCAGATGGATGATATGAT 720
 DB 661 GTCTTGTGGCGATGCTCTTCCCTCGGAGTGGCTGTCTTCCAGATGGATGATATGAT 720
 QY 721 TCCCTGATGCTCTCTTCAAACTTCTCAATTCAGATTCATCAACAAAGAGGCGCTCT 780
 DB 721 TCCCTGATGCTCTCTTCAAACTTCTCAATTCATCAACAAAGAGGCGCTCTCTCC 780
 QY 781 CGAGGAAAGACCACTGAGAGGCGCAACGAGAGGCTGTGTGTGTGTGTGTGTGTGTGT 840
 DB 781 CGAGGAAAGACCACTGAGAGGCGCAACGAGAGGCTGTGTGTGTGTGTGTGTGTGTGT 840

QY 841 ACCAAGCTTCCCTCTGAGAAACAGCGTGAAGCCGAGAGCAGCAAGAGATTTGA 900
 DB 841 ACCAAGCTTTCACCCCTGAGAAACATGTGAAGCCAGAGAGCTGGAGAGATTTGA 900

RESULT 7
 US-10-408-736-3
 Sequence 3, Application US/10408736
 Publication No. US20030177508A1
 GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Das, Tapas
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Parker-Barnes, Jennifer M.
 APPLICANT: Leonard, Amanda Eun-yeong
 APPLICANT: Thurmond, Jennifer M.
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 FILE REFERENCE: 6407.US.P1
 CURRENT APPLICATION NUMBER: US/10/408,736
 CURRENT FILING DATE: 2003-04-04
 PRIOR APPLICATION NUMBER: US/09/379,095A
 PRIOR FILING DATE: 1998-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 81
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 3
 LENGTH: 914
 TYPE: DNA
 ORGANISM: Homo sapiens
 US-10-408-736-3

Query Match 79.6%; Score 716; DB 14; Length 914;
 Best Local Similarity 87.2%; Pred. No. 2,7e-226;
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60
 DB 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60
 QY 61 ACAAGAGTCAAGAGTGTCTCCCTGAGCAATTCATCCCTAGCTTTGTCGTCTGTT 120
 DB 61 ACTAGAGTAAAGAGTGTCTCTTCTGAGCAATTCATCCCTAGCTTTGTCGTCTGTT 120
 QY 121 ATTACTTACTCTATGCTGAGGACCAAAATACATGAGAACCGGACGCGTCTCT 180
 DB 121 ATATATTACTATATTGATGCTGGAGACCAAAATACATGAGAACCGGACGCGTCTCT 180
 QY 181 TGGCGAGGACATCCTGCACTGTATTAACCTTGGATCAACCTCTCTCTCTACATGTT 240
 DB 181 TGGCGAGGATTTTATGTGTATTAACCTTGGATCAACCTCTCTCTCTCTATATGTT 240
 QY 241 TATGAGTGTGTGACAGTGTGTGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACGC 300
 DB 241 TGTGAGTGTGTGACAGGATGTGTGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACGC 300
 QY 301 AGCGGAGAGATCCGATATGAAGATCCGCGCTCTGCTGTGTAATCTTCTCAAA 360
 DB 301 ACCGAGAGAGATCCGATATGAAGATTCGCGCTCTGCTGTGTAATCTTCTCAAA 360
 QY 361 CTGATGGAATTCATGAGACCTTTCTTCTTCTGCAATTCCTGCAAGAACCAACGAGTACC 420
 DB 361 CTGATGGAATTTATGAGACCTTTCTTCTTCTGCAATTCCTGCAAGAACCAACGAGTACC 420
 QY 421 GTGCTCCATGTCTACCAACGAGTACCATGCTCAACATCTGTGTGTGTGTGTGTGTGTGT 480
 DB 421 GTGCTGACGTCTACCAACGAGTACCATGCTCAACATCTGTGTGTGTGTGTGTGTGTGT 480
 QY 481 GTTCCCTGGGCGCATTCATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
 DB 481 GTTCCCTGGGCGCATTCATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540


```

QY 541 TACTCGACTAGTGTCTGTCTCTCAATCCCGTCATGCGTCCCTACTCTGTGTGAAAAAG 600
Db 541 TACTCTTACTATGTTGTTGTCGTCAGTCCCTTCCATGCGTCCATCTTGTGTGAAAGAG 600
QY 601 TACATCACTCAAGGGGAGGTGTGTCAGTTTGTGTGACATCATCAGACGACCTGGGG 660
Db 601 TACATCACTCAAGGGGAGGTGTGTCAGTTTGTGTGACATCATCAGACGACCTGGGG 660
QY 661 GTCTTCGCGCATGCTCCCTCCCTCGGGGTGCTCTCCGATTTGATATATAT 720
Db 661 GTATCTGCGCGTCGACATCTCCCTGTGTGTGTATTTCCAGATTGATATATAT 720
QY 721 TCCCTGATTGCTCTCTTCAACAATCTTCACTTCACTTCAACAAGAGGGGCTCT 780
Db 721 TCCCTGATTGCTCTCTTCAACAATCTTCACTTCACTTCAACAAGAGGGGCTCT 780
QY 781 CGAGAGAAAGACCACTGTAAGGGCCACAGAACGGGTCTGTGCGCGCTCAAGACAC 840
Db 781 CGAAGAGAAAGACCACTGTAAGAGCACACAGATGGGTCCGTGGCTGTGTAATGACAC 840
QY 841 ACCAAGAGCTTCCCTCCCTGGAGAAACAGCGTGAAGCCAGAGAACAGAAAGATTGA 900
Db 841 ACCAAGAGCTTTCACCCCTGGAGAAACATGTGAAGCCAGAGAGCTGGAGAGATTGA 900

```

RESULT 8 US-10-431-952-21

```

; Sequence 21, Application US/10431952
; Publication No. US2003019073A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; APPLICANT: Thurmond, Jennifer
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763.US.01
; CURRENT APPLICATION NUMBER: US/10/431,952
; PRIOR FILING DATE: 2003-05-08
; PRIOR APPLICATION NUMBER: US/09/769,863
; PRIOR FILING DATE: 2001-01-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-431-952-21

```

```

Query Match 79.6%; Score 716; DB 14; Length 914;
Best Local Similarity 87.2%; Pred. No. 2.7e-226;
Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

```

```

QY 1 ATGAACATTTCGATCGCTCACTAGTACCTATTTCAAGGCTTCTGGCCCGGAGAT 60
Db 1 ATGAACATTTCGATCGCTCACTAGTACCTATTTCAAGGCTTCTGGCCCGGAGAT 60
QY 61 ACAAGATCAAGAGATGTTCTCTCTGCAATTAATCAATCCTAGCTTTGTCTGTT 120
Db 61 ACTAGATTAAGAGATGTTCTCTCTGCAATTAATCAATCCTAGCTTTGTCTGTT 120
QY 121 ATTACTTACTCATTTGATAGGCTGGAGCAAAATCATGAAGAACGGGACCGTCTCT 180
Db 121 ATTATATTACTATTTGATAGGCTGGAGCAAAATCATGAAGAACGGGACCGTCTCT 180
QY 181 TGCGAGGACCTCTGAGTGTATTAACCTTGAGACTCACCTGCTGTCTCTCAATGTT 240
Db 181 TGCGAGGACCTCTGAGTGTATTAACCTTGAGACTCACCTGCTGTCTCTCAATGTT 240
QY 241 TATGAGTTGTGACAGTGTGTGGAGGGCAATTAACATTTTCTGCAAGGAACGCG 300
Db 241 TGTGAGTTGTGACAGGATGTGGAGGGCAATTAACATTTTCTGCAAGGAACGCG 300

```

```

QY 301 AAGCGGGAGATCCGATATAGATATATCCGCGCTCTGTGTGTCTACTTCTCCAA 360
Db 301 ACCGAGAGAGATCAAGATATAGATATATCCGCGCTCTGTGTGTCTACTTCTCCAA 360
QY 361 CTCATGATTCATGAGACCTTTTCTTCACTCTTGGCAAGAACCAACAGATACCC 420
Db 361 CTCATGATTCATGAGACCTTTTCTTCACTCTTGGCAAGAACCAACAGATACCC 420
QY 421 GTGCTCATGTCTACACCAAGCTCATGCTCAACATCTGTGTGTGTGTGTGTGTGT 480
Db 421 GTGCTCATGTCTACACCAAGCTCATGCTCAACATCTGTGTGTGTGTGTGTGTGT 480
QY 481 GTTCCCTGCGGCAATTCATATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
Db 481 GTTCCCTGCGGCAATTCATATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
QY 541 TACTGTATCTATGTGTCTCTCATCCGCTCATGCTGCTCTTACTGTGTGTGTGT 600
Db 541 TACTGTATCTATGTGTGTCTCTCATCCGCTCATGCTGCTCTTACTGTGTGTGTGT 600
QY 601 TACATCACTCAAGGGGAGCTGTGTCAGTTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
Db 601 TACATCACTCAAGGGGAGCTGTGTCAGTTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
QY 661 GTCTTCGCGCATGCTCCCTCCCTCGGGGTGCTGTCTTCAAGATTGATATCATGAT 720
Db 661 GTCTTCGCGCGTGTGACATTCCTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 720
QY 721 TCCCTGATTGCTCTCTTACAACTTCACTTCACTTCACTTCACTTCACTTCACTT 780
Db 721 TCCCTGATTGCTCTCTTACAACTTCACTTCACTTCACTTCACTTCACTTCACTT 780
QY 781 CGAGAGAAAGACCACTGTAAGGGCCACAGAACGGGTCTGTGCGCGCTCAAGACAC 840
Db 781 CGAAGAGAAAGACCACTGTAAGAGCACACAGATGGGTCCGTGGCTGTGTAATGACAC 840
QY 841 ACCAAGAGCTTCCCTCCCTGGAGAAACAGCGTGAAGCCAGAGAACAGAAAGATTGA 900
Db 841 ACCAAGAGCTTTCACCCCTGGAGAAACATGTGAAGCCAGAGAGCTGGAGAGATTGA 900

```

RESULT 9

```

; US-10-264-237-936
; Sequence 936, Application US/10264237
; Publication No. US2004009491A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA131P1
; CURRENT APPLICATION NUMBER: US/10/264,237
; PRIOR FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/16450
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/205,515
; NUMBER OF SEQ ID NOS: 2876
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 936
; LENGTH: 1997
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1326)..(1326)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: misc.feature
; LOCATION: (1485)..(1485)
; OTHER INFORMATION: n equals a,t,g, or c

```

```

Query Match 67.1%; Score 603.6; DB 15; Length 1997;
US-10-264-237-936

```


LOCATION: (721)
OTHER INFORMATION: n equals a,t,g, or c
US-09-764-868-352

Query Match 51.7%; Score 465.6; DB 9; Length 748;
Best Local Similarity 86.4%; Pred. No. 2,7e-143;
Matches 513; Conservative 1; Mismatches 80; Indels 0; Gaps 0;

QY 1 ATGAACATTGGATCGTCACTGACAGTACCTATTTCAAGGCGCTTCGGGCCCCGAGAT 60
DB 107 ATGAACATTGGATCGTCACTGACAGTACCTATTTCAAGGCGCTTCGGGCCCCGAGAT 166
QY 61 ACAAGATCAAGAGATGGTTCCTCGACAAATTAATCCCTAGCTTGTCTGTCTT 120
DB 167 ACTAGATAAAGATGGTTCCTCGACAAATTAATCCCTAGCTTGTCTGTCTT 226
QY 121 ATTACTTACTCTTTGTATGGCTGGGACCAATTAATCAAGGACCGGACCGCTTCT 180
DB 227 ATATATTACTTAATTTGTATGGCTGGGACCAATTAATCAAGGACCGGACCGCTTCT 286
QY 181 TGCCGAGCATCTCGAGTTGTATACTTGAACCTTGAACCTCAGCCCTGCTCTCTAGATGTT 240
DB 287 TGCCGGGGGATTTAGTGTGTATTAACCTTGAACCTCAGCTGCTCTCTGTATATGTT 346
QY 241 TATGAGTTGTGACAGGTGTGTGGAGGCAATTAACACTTTTCTGCCAGGAAACAGC 300
DB 347 TGTAGTTAGTAAACAGAGATATGGGAAGCAATCAACTTCTTGTCAAGGCAACAGC 406
QY 301 AGCGGGGAGATCCGATTAAGATCATCCGGTCTGTGTGTGTACTACTTCTCCAA 360
DB 407 ACCGACAGAGATCAAGTATGAAGATTATCCGTGCTGTGTGTGTACTACTTCTCCAA 466
QY 361 CTATCGAATTATGACACCTTTTCTTCTTCTTCTGCGAAGAACCAACCAAGTAC 420
DB 467 CTATAGAAATTATGACACTTCTTCTTCTTCTTCTGCGAAGAACCAACCAAGTAC 526
QY 421 GTGCTCATGTACCAACCAAGTATGACACTTCTTCTTCTTCTGCGAAGAACCAAGTAC 480
DB 527 GTGCTCATGTACCAACCAAGTATGACACTTCTTCTTCTTCTGCGAAGAACCAAGTAC 586
QY 481 GTTCCCTGCGGCATTCATTTTGTGTGACACTCAACAGCTTCAATCATGCTCTCATG 540
DB 587 GTTCCCTGCGGCATTCATTTTGTGTGACACTCAACAGCTTCAATCATGCTCTCATG 646
QY 541 TACTCTACTATGCTGTCTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 594
DB 647 TACTCTACTATGCTGTCTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 700

RESULT 12
US-09-903-456-5
Sequence 5, Application US/09903456
Patent No. US20020138874A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradiip
APPLICANT: Leonard, Amanda Sun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette J.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407.US.E3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 5
LENGTH: 879

TYPE: DNA
ORGANISM: Mus musculus
US-09-903-456-5

Query Match 38.3%; Score 345; DB 9; Length 879;
Best Local Similarity 65.8%; Pred. No. 3e-103;
Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

QY 10 TTGCATGGCTCACTAGTACCTATTTCAAGGCGCTTCGGGCCCCGAGATACAGATC 69
DB 19 TTGCATTAATGAAGTAAAGCTTTCTTGTGACAAACATGTTGGACACAGATTCGAGTT 78
QY 70 AAAGATGGTTCCTCTGACCAATTAATCCCTAGCTTGTCTGTCTTGTATTTACTTA 129
DB 79 CCGGGAGGTTCCTCTGACCAATTAATCCCTAGCTTGTCTGTCTTGTATTTACTTA 138
QY 130 CTCATTTATGCTGCTGGGCAAAATTAATGAAGAACCGGACCGCTCTCTGCGAGGC 189
DB 139 CTCCTGATATGCTGCTGGGCAAAATTAATGAAGAACCGGACCGCTCTCTGCGAGGC 198
QY 190 ATCTGCAAGTTGATTAACCTTGAACCTCAGCCCTGCTGTCTTCAATGTTCTATGATTG 249
DB 199 ATCTGCAAGTTGATTAACCTTGAACCTCAGCCCTGCTGTCTTCAATGTTCTATGATTG 258
QY 250 GTGACAGGTGTGGGAGGCAATTAACACTTTTCTGCCAGGAAACAGCAGGCGGGA 309
DB 259 ATCTCTCCAGCTGGGAGGAGTTTCAACTTGAAGTGTCAATTCGACAGTGCAGGA 318
QY 310 GAATCCGATATGAATCATCCGCTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 369
DB 319 GAAGGTATGTCCGGGTGAGCAAGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 378
QY 370 TTCAATGACACTTTTCTTCACTCTTGTGCAAGAACCAACCAAGTATCCGCTCAT 429
DB 379 TTCCGAGACCAATTTCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 438
QY 430 GTCTCAACCAAGTATCAATGCTCAATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 489
DB 439 GTCTCAACCAAGTATCAATGCTCAATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 498
QY 490 GGCATTCATTTTGTGTGCACTCAACAGCTTCAATCATGCTCTCATGTTACTGTTAC 549
DB 499 GGCATTCATTTTGTGTGCACTCAACAGCTTCAATCATGCTCTCATGTTACTGTTAC 558
QY 550 TATGCTGTCTCTCATCCGCTCATGCTGCTTCACTGCTGCTGCTGCTGCTGCTGCTGCT 609
DB 559 TATGCTGTCTCTCATCCGCTCATGCTGCTTCACTGCTGCTGCTGCTGCTGCTGCTGCT 618
QY 610 CAAGGACGCTGCTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 669
DB 619 CAGGCTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 678
QY 670 CCATGCTCTTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 729
DB 679 CCCTGCTCTTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 738
QY 730 GCTCTCTCAACCTTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 770
DB 739 ATCTGCTCTTAACTTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 779

RESULT 13
US-09-849-199A-22
Sequence 22, Application US/09849199A
Publication No. US20030082754A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradiip
APPLICANT: Thurmond, Jennifer M.
APPLICANT: Huang, Yung-Sheng
APPLICANT: Das, Tapas
TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES THEREOF
LENGTH: 879

FILE REFERENCE: 6804.US.01
 CURRENT APPLICATION NUMBER: US/09/849,199A
 CURRENT FILING DATE: 2002-04-15
 NUMBER OF SEQ ID NOS: 38
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO: 22
 LENGTH: 879
 TYPE: DNA
 ORGANISM: Mus musculus
 US-09-849-199A-22

Query Match 38.3%; Score 345; DB 10; Length 879;
 Best Local Similarity 65.8%; Pred. No. 3e-103;
 Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

```

QY 10 TTCATGCGTCACTCACTCACTATTTCAAGCCCTCTGGGCCCCCGAATACAGAGTC 69
DB 19 TTGATATGAAGTCAATGCTTTCTTGACACATGTTTGACACGAGATTCCTGAGTT 78
QY 70 AAGGATGCTTCTCTCGACCAATTACATCCCTACGTTTGTCTGTATTACTTA 129
DB 79 CGCGGGTGTCTCTCGTGAAGTCTTACCTTCCACCTTATCTCAGCATCAGTACCTG 138
QY 130 CTCATTGATGCTGGGACCAAAATATAGTAAGAACCGGACGCTTCTTGGCGAGGC 189
DB 139 CTCCTGATATGCTGGGTAACAAGTACATGAGAACAGGCTCTCTGTCTCTCAGGGGC 198
QY 190 ATCTCGAGTGTATACCTTGACCTGACCTGCTGCTCTACAGTTCTATAGATTG 249
DB 199 ATCTCGACCTTGTAACCTTCGCANATCACTTTCTTGGGTATATGCTGGTGAAGCTC 258
QY 250 GTGACAGTGTGTGGGAGGGAATAATACACTTTTCTGCGAGGAAACAGCAGCGGGGA 309
DB 259 ATCTCTCGACCTGGGAGGAGGATTAACCTTGAGTGAAGTCCGACAGTGCAGGA 318
QY 310 GAATCCGATATGAAGATATCCGCTCTCTGTTGATCTTCTTCCAACTCATGAA 369
DB 319 GAAAGTGTATGTCGGGAGGCCAAGCTTGTGGGTGATCACTTCTCCAACTGAGTGA 378
QY 370 TTCATGACACCTTTTCTTCTATCTTGACAGAACACACAGATCACCGGTCCAT 429
DB 379 TTCTCGACACGATTTTCTTGTCTTACGAAAAAGACAAATGATACCTTCTCAT 438
QY 430 GTCTACACACAGCTTACATGCTCAACATCTGTGTGTGTGTGATGAATGCTTCCCTGC 489
DB 439 GTCTATCACACAGCTGCTCAATGTCATCTGTGTGTGTGTGTGAACTGGAATACCTTGT 498
QY 490 GGCACTTATATTTTGTGGGACACCTGACAGCTTCAATGCTCTCATGTACTGTGAC 549
DB 499 GGTCAAGCTTCTTGTGACCACTGACAGCTTATACCAATCTCATGTACTGTGAC 558
QY 550 TATGCTCTGCTCCATCCGCTGACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 609
DB 559 TACGGCTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 618
QY 610 CAAGGACAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 669
DB 619 CAGGCTCAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 678
QY 670 CCATGCTCTTCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 729
DB 679 CCCTGTGCTTCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 738
QY 730 GCTCTCTTCAAACTTCTTACATTCAGCTTACAAAGAA 770
DB 739 ATCTGCTTCTTAACTTCTTATATTCAGATACGGAAGAAA 779

```

APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Thirumang, Jennifer M.
 APPLICANT: Huang, Jung-Sheng
 APPLICANT: Das, Tapas
 APPLICANT: Leonard, Amanda E.
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
 TITLE OF INVENTION: THEREOF
 FILE REFERENCE: 6804.US.01
 CURRENT APPLICATION NUMBER: US/10/120,637A
 CURRENT FILING DATE: 2002-04-11
 PRIOR APPLICATION NUMBER: US 09/849,199
 PRIOR FILING DATE: 2001-05-04
 NUMBER OF SEQ ID NOS: 73
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO: 22
 LENGTH: 879
 TYPE: DNA
 ORGANISM: Mus musculus
 US-10-120-637A-22

Query Match 38.3%; Score 345; DB 14; Length 879;
 Best Local Similarity 65.8%; Pred. No. 3e-103;
 Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

```

QY 10 TTCATGCGTCACTCACTCACTATTTCAAGCCCTCTGGGCCCCCGAATACAGAGTC 69
DB 19 TTGATATGAAGTCAATGCTTTCTTGACACATGTTTGACACGAGATTCCTGAGTT 78
QY 70 AAGGATGCTTCTCTCGACCAATTACATCCCTACGTTTGTCTGTATTACTTA 129
DB 79 CGCGGGTGTCTCTCGTGAAGTCTTACCTTCCACCTTATCTCAGCATCAGTACCTG 138
QY 190 ATCTCGAGTGTATACCTTGACCTGACCTGCTGCTCTACAGTTCTATAGATTG 249
DB 199 ATCTCTCGACCTGGGAGGAGGATTAACCTTGAGTGAAGTCCGACAGTGCAGGA 318
QY 310 GAATCCGATATGAAGATATCCGCTCTCTGTTGATCTTCTTCCAACTCATGAA 369
DB 319 GAAAGTGTATGTCGGGAGGCCAAGCTTGTGGGTGATCACTTCTCCAACTGAGTGA 378
QY 430 GTCTACACACAGCTTACATGCTCAACATCTGTGTGTGTGTGATGAATGCTTCCCTGC 489
DB 439 GTCTATCACACAGCTGCTCAATGTCATCTGTGTGTGTGTGTGAACTGGAATACCTTGT 498
QY 490 GGCACTTATATTTTGTGGGACACCTGACAGCTTCAATGCTCTCATGTACTGTGAC 549
DB 499 GGTCAAGCTTCTTGTGACCACTGACAGCTTATACCAATCTCATGTACTGTGAC 558
QY 550 TATGCTCTGCTCCATCCGCTGACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 609
DB 559 TACGGCTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 618
QY 610 CAAGGACAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 669
DB 619 CAGGCTCAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 678
QY 670 CCATGCTCTTCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 729
DB 679 CCCTGTGCTTCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 738

```

RESULT 14
 US-10-120-637A-22
 ; Sequence 22, Application US/10120637A
 ; Publication No. US20030134400A1
 ; GENERAL INFORMATION:

QY 730 GCTCTCTCAAACTTCTACATTCAGACTTACAAAGAA 770
 Db 739 ATCTGTCTTAACTTCTATATTCAGACATACCGAATAA 779

RESULT 15

US-10-156-911-5

; Sequence 5, Application US/10156911

; Publication No. US2003016345A1

; GENERAL INFORMATION:

; APPLICANT: Abbott Laboratories

; APPLICANT: Mukerji, Pradip

; APPLICANT: Leonard, Amanda Eun-Yeong

; APPLICANT: Huang, Yung-Sheng

; APPLICANT: Pereira, Suzette L.

; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

; FILE REFERENCE: 6407.US.P4

; CURRENT APPLICATION NUMBER: US/10/156,911

; PRIOR FILING DATE: 2002-10-01

; PRIOR APPLICATION NUMBER: US 09/903,456

; PRIOR FILING DATE: 2001-07-11

; PRIOR APPLICATION NUMBER: US 09/624,670

; PRIOR FILING DATE: 2000-07-24

; PRIOR APPLICATION NUMBER: US 09/379,095

; PRIOR FILING DATE: 1999-08-23

; PRIOR APPLICATION NUMBER: US 09/145,828

; PRIOR FILING DATE: 1998-09-02

; NUMBER OF SEQ ID NOS: 122

; SOFTWARE: FaastSeq for Windows Version 4.0

; SEQ ID NO 5

; LENGTH: 879

; TYPE: DNA

; ORGANISM: Mus musculus

US-10-156-911-5

Query Match 38.3%; Score 345; DB 14; Length 879;

Best Local Similarity 65.8%; Pred. No. 3e-103; Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

QY 10 TTGATGCTCACTCACTAGTACTATTTCAAGGCTTCTGGGCCCCCGAGATACAGAGTC 69
 Db 19 TTGATATAGTAGTCAATGCTTCTTGACAAACATGTTGACACGAGATTCGAGTT 78
 QY 70 AAAGATGCTTCTCTCTGACAAATTAATCCTTACGTTTGTCTGTTATTACTTA 129
 Db 79 CGGCGTGGTCTCTCTGACCTTACCTTCCACCTTACCTCACCATCAGTACCTG 138
 QY 130 CTGATGTATGGTGGGCAACAAATTAATCAAGAAACGCGAGCCGTTCTTGGCGAGGC 189
 Db 139 CTGCGATATGGCTGGGTAAACAGTACATGAAGAAACAGGCTGCTGTCTCTAGGGGC 198
 QY 190 ATCTCGAGTGTATTAATCCTTGAATCACTCCCTGCTGTCTCTAATGTTATAGTTG 249
 Db 199 ATCTCACCTGTATTAATCCTTGAATCACTTCTTCTGCTATATGCTGTGAGCTC 258
 QY 250 GTACACAGTGTGTGGAGGCAATTAATCACTTCTTCTGCAAGGAACAGCAGCGCGGA 309
 Db 259 ATCTCTCAAGCTGGGAGAGGATTACAACTTGACGTTCAGAACTTCGACAGTCAGGA 318
 QY 310 GAATCCGATATGAAGATCAATCCGCGTCTCTGCTGCTACTTCTCCAAACTATCGAA 369
 Db 319 GAAGGTAGTCCGGGTACCAAGGCTTGTGTGTGTACTTCTCCAACTAGTGGAG 378
 QY 370 TTATGAGACACCTTTTCTTCACTCTTGCAAGAAACACACAGATACCGTGTCCAT 429
 Db 379 TTCTTGACACGATTTCTTGTCTAGCAAAAAAGACCAATCAATCACTTCTTCTCAT 438
 QY 430 GTCTACCAACGCTACATGCTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 489
 Db 439 GTCTATCACACCGCTCCATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 498
 QY 490 GGCCATTCAATTTTGT 549

Db 499 GGTCAAGCTTCTTTGACACCAACCTGAAAGCTTTATCCATTTCTCATGTACTCTAC 558
 QY 550 TATGCTGTCTCTCATTCCTGTCATGCGTCCATGCGTCCCTGCTGTGTGTGTGTGTGTGT 609
 Db 559 TACGGCTGTCTGT 618
 QY 610 CAAGGAGAGT 669
 Db 619 CAGGCTCAGCTGT 678
 QY 670 CCATGCTTCTTCT 729
 Db 679 CCTGTGGCTTCCCTTGT 738
 QY 730 GCTCTCTCAAACTTCTACATTCAGACTTACAAAGAA 770
 Db 739 ATCTGTCTTAACTTCTATATTCAGACATACCGAATAA 779

Search completed: April 1, 2004, 10:45:04

Job time : 383.956 secs


```

Db      241 TATAGTTGGTGCAGAGTGTGGAGGAAATACAACTTTTCTGCCAGGAAACAGC 300
QY      301 AGGCGGGAGAAATCCCATATGAAAGATCATCCCGCTCTCTGTGTACTTCTCCAA 360
Db      301 AGGCGGGAGAAATCCCATATGAAAGATCATCCCGCTCTCTGTGTACTTCTCCAA 360
QY      361 CTATGGAATTCATGACACCTTTTCTCATCTCTCCAGAAACAAACCAACATGACC 420
Db      361 CTATGGAATTCATGACACCTTTTCTCATCTCTCCAGAAACAAACCAACATGACC 420
QY      421 GTCTCCATGCTTACCAACAGCTACATGCTCAACATCTGTGTGTATGAACTGG 480
Db      421 GTCTCCATGCTTACCAACAGCTACATGCTCAACATCTGTGTGTATGAACTGG 480
QY      481 GTTCCCTGGGCGCATCATATTTGGTGGACATCAACAGTTTATCATGCTCATG 540
Db      481 GTTCCCTGGGCGCATCATATTTGGTGGACATCAACAGTTTATCATGCTCATG 540
QY      541 TACTGTACTATGCTGTCTCTCCATCCGCTCATGCTCTCTGTGTGAAAG 600
Db      541 TACTGTACTATGCTGTCTCTCCATCCGCTCATGCTCTCTGTGTGAAAG 600
QY      601 TATATCACTCAAGGAGGAGTGTGCTGCTGCAATGCAATGCAAGACCTGGGG 660
Db      601 TATATCACTCAAGGAGGAGTGTGCTGCTGCAATGCAATGCAAGACCTGGGG 660
QY      661 GTCTTCGGCCATGCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
Db      661 GTCTTCGGCCATGCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
QY      721 TCCCTGATGCTCTCTCTCAAACTTCTACATGACTTACAAACAAAGAGGAGCTCT 780
Db      721 TCCCTGATGCTCTCTCTCAAACTTCTACATGACTTACAAACAAAGAGGAGCTCT 780
QY      781 CGAGAGAAAGACCACTGAAAGGAGCAGAGAGGAGCTGTGAGGAGCTCAAGAC 840
Db      781 CGAGAGAAAGACCACTGAAAGGAGCAGAGAGGAGCTGTGAGGAGCTCAAGAC 840
QY      841 ACCAAGAGCTTCCCTCTCTGAAAGACGCTGAAAGCCAGAGAGCAGAGAGATTGA 900
Db      841 ACCAAGAGCTTCCCTCTCTGAAAGACGCTGAAAGCCAGAGAGCAGAGAGATTGA 900

```

RESULT 2
US-09-769-863-21
Sequence 21, Application US/09769863
Patent No. 6635451
GENERAL INFORMATION:

APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Huang, Yung-Sheng
APPLICANT: Das, Tapas
APPLICANT: Thumond, Jennifer
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
FILE REFERENCE: 6763 US.OI
CURRENT APPLICATION NUMBER: US/09/769,863
NUMBER FILING DATE: 2001-01-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 21
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-09-769-863-21

Query Match 79.6%, Score 716, DB 4, Length 914;
Best Local Similarity 87.2%, Pred. No. 7, 1e-215;
Matches 785, Conservative 0, Mismatches 115, Indels 0, Gaps 0;

```

QY      1 ATGAACATTTCATGCGTCACTGACTTCTTCAAGAGCTTCTGGGCGCCGAGAT 60
Db      1 ATGAACATTTCATGCGTCACTGACTTCTTCAAGAGCTTCTGGGCGCCGAGAT 60

```

```

QY      61 ACAAGTCAAGAGATGGTTCCTCTGGAACAATTACCTCTAGCTTGTCTGTCTGT 120
Db      61 ACTAAGTCAAGAGATGGTTCCTCTGGAACAATTATACCATTTATCTGCTGTCTG 120
QY      121 ATTTACTTACTATTTATGAGCTGGGACCAAAATATGATGAAGACCGGACCGTCTCT 180
Db      121 ATATATTTACTATTTATGAGCTGGGACCAAAATATGATGAAGATGAAGACCGTCTCT 180
QY      181 TGCCGAGGATCTCCGATTTATATACCTTGGATCTCAACCTGCTGTCTCTACATGTC 240
Db      181 TGCCGAGGATTTTATGAGTATATACCTTGGATCTCAACCTGCTGTCTCTATATGTC 240
QY      241 TATGAGTTGTGACAGTGTGTGGAGGCAATATCACTTTTCTGCAAGGAAACAGC 300
Db      241 TGTGAGTTAGTAAAGAGATATGGGAAGGCAAAATACAACTTCTCTGCAAGGAAACAGC 300
QY      301 AGCGGGAGAAATCCGATATGAAGATCATCCGCTCTCTGTGTGTACTTCTCCAA 360
Db      301 AGCGGGAGAAATCCGATATGAAGATCATCCGCTCTCTGTGTGTACTTCTCCAA 360
QY      361 CTATGGAATTTATGACATCTTCTTCACTCTGCGCAAGAAACACACAGATACG 420
Db      361 CTATGGAATTTATGACATCTTCTTCACTCTGCGCAAGAAACACACAGATACG 420
QY      421 GTGTCATGCTTACCAACAGCTACATGCTCAACATCTGTGTGTGTGTGAACTGG 480
Db      421 GTGTCATGCTTACCAACAGCTACATGCTCAACATCTGTGTGTGTGTGAACTGG 480
QY      481 GTTCCCTGGGCGCATCATATTTGGTGGACATCAACAGTTTATCATGCTCATG 540
Db      481 GTTCCCTGGGCGCATCATATTTGGTGGACATCAACAGTTTATCATGCTCATG 540
QY      541 TACTGTACTATGCTGTCTCTCCATCCGCTCATGCTCTCTGTGTGAAAG 600
Db      541 TACTGTACTATGCTGTCTCTCCATCCGCTCATGCTCTCTGTGTGAAAG 600
QY      601 TATATCACTCAAGGAGGAGTGTGCTGCTGCAATGCAATGCAAGACCTGGGG 660
Db      601 TATATCACTCAAGGAGGAGTGTGCTGCTGCAATGCAATGCAAGACCTGGGG 660
QY      661 GTCTTCGGCCATGCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
Db      661 GTCTTCGGCCATGCTCTCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
QY      721 TCCCTGATGCTCTCTCTCAAACTTCTACATGACTTACAAACAAAGAGGAGCTCT 780
Db      721 TCCCTGATGCTCTCTCTCAAACTTCTACATGACTTACAAACAAAGAGGAGCTCT 780
QY      781 CGAGAGAAAGACCACTGAAAGGAGCAGAGAGGAGCTGTGAGGAGCTCAAGAC 840
Db      781 CGAGAGAAAGACCACTGAAAGGAGCAGAGAGGAGCTGTGAGGAGCTCAAGAC 840
QY      841 ACCAAGAGCTTCCCTCTCTGAAAGACGCTGAAAGCCAGAGAGCAGAGAGATTGA 900
Db      841 ACCAAGAGCTTCCCTCTCTGAAAGACGCTGAAAGCCAGAGAGCAGAGAGATTGA 900

```

RESULT 3
US-09-903-456-3
Sequence 3, Application US/09903456
Patent No. 6677145
GENERAL INFORMATION:

APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407 US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
NUMBER FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670

; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 914
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-09-903-456-3

Query Match 79.6%; Score 716; DB 4; Length 914;
 Best Local Similarity 87.2%; Pred. No. 7,1e-215;
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGAGACATTCGATGGCTGACAGTACTATTTCAAGGCTTCTGGGCCCCGAGAT 60
 DB 1 ATGAGACATTTGATGATCAGTACCTAGTACCTATTTCAAGGCAATTGCTAGGCCCTGAGAT 60
 QY 61 ACAAGATCAAGAGATGCTTCTCTGGAACATTACCTCCCTACGTTTGTCTGTCT 120
 DB 61 ACTAGAGTAAAGATGCTTCTCTGGAACATTATACCCACATTTATCTGCTCTGTC 120
 QY 121 ATTTACTACTGATGATGCTGGGACCAAAATATGAAGAAGCCGAGCGCTCTCT 180
 DB 121 ATATTTACTAATTTGATGCTGGGACCAAAATATGAAGAAGCCATCTCTCT 180
 QY 181 TGCCGAGGATCTGCACTGATGATACCTTGATACCTGCTGCTCTCTATCATGTC 240
 DB 181 TGCCGAGGATTTTATGATGCTGATACCTTGATACCTGCTGCTCTCTATCATGTC 240
 QY 241 TATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300
 DB 241 TATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300
 QY 241 TGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300
 DB 241 TGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300
 QY 301 AGCGGAGAGATCGATATGATGATGATGATGATGATGATGATGATGATGAT 360
 DB 301 ACCGAGAGATCGATATGATGATGATGATGATGATGATGATGATGATGAT 360
 QY 361 CTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420
 DB 361 CTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420
 QY 421 GTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 480
 DB 421 GTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 480
 QY 481 GTTCCCTGCGGCACTGATGATGATGATGATGATGATGATGATGATGATG 540
 DB 481 GTTCCCTGCGGCACTGATGATGATGATGATGATGATGATGATGATGATG 540
 QY 541 TACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600
 DB 541 TACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600
 QY 601 TACATCACTCAAGGAGAGATGATGATGATGATGATGATGATGATGATGAT 660
 DB 601 TACATCACTCAAGGAGAGATGATGATGATGATGATGATGATGATGATGAT 660
 QY 661 GTTCTGCGGCACTGATGATGATGATGATGATGATGATGATGATGATGAT 720
 DB 661 GTTCTGCGGCACTGATGATGATGATGATGATGATGATGATGATGATGAT 720
 QY 721 TCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780
 DB 721 TCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780
 QY 781 CGAGAGAGAGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 840
 DB 781 CGAGAGAGAGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 840

QY 841 ACCAGAGCTTCCCTTCCCTGAGAAACAGCGTGAAGCCAGAGAGAGAGATGTA 900
 DB 841 ACCAGAGCTTTTACCTCTGAGAAACATGTAAGCCAGAGAGAGATGTA 900

RESULT 4

US-09-903-456-5
 ; Sequence 5, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US.P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; PRIOR FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 5
 ; LENGTH: 879
 ; TYPE: DNA
 ; ORGANISM: Mus musculus
 US-09-903-456-5

Query Match 38.3%; Score 345; DB 4; Length 879;
 Best Local Similarity 65.8%; Pred. No. 2.7e-98;
 Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

QY 10 TTGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 69
 DB 19 TTGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 78
 QY 70 AAAGAGATGCTTCCCTGAGCAATTAATGCTGCTGCTGCTGCTGCTGCTGCT 129
 DB 79 CGCGGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 138
 QY 130 CTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 189
 DB 139 CTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 198
 QY 190 ATCTGCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 249
 DB 199 ATCTGCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 258
 QY 250 GTGACAGGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 309
 DB 259 ATCTGCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 318
 QY 310 GAATCCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 369
 DB 319 GAATCCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 378
 QY 370 TTGATGAGACCTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 429
 DB 379 TTCTGAGACGATTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 438
 QY 430 GTTACACAGAGTACATGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT 489
 DB 439 GTTACACAGAGTACATGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT 498
 QY 490 GGCATTCATTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 549
 DB 499 GGCATTCATTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 558


```
QY 550 TANGCTGTCCCTCCATCCCGTCATGAGTCCCTACCTCTGTGGAAAAAGTACATCACT 609
DB 559 TAGGCGCTGTCTGTGTCCCGTCATGACCAAGTACCTTTGTGAAAGAGTACTACA 618
QY 610 CAAGGACAGCTGATCCAGTTTGTGCTGACAAATCATCAGACAGACCTGGGGTCTTGG 669
DB 619 CAGGCTCACTGATGAGTTGCTACTCAGCATCAGCAGCAGCAGAGTGGCGTGTGAAG 678
QY 670 CCATGCTCCTTCCCTCTGCGGGGTGCTGTCTTCCAGATGGATATGATTTCCCTGATT 729
DB 679 CCTGTGGCTTCCCTTGGCTGTGCTCATCTTCCAGTCTCTATATGATGAGCGTGTGC 738
QY 730 GCTCTCTCACAACCTTTCACATTCAGACTTACCAACAGAA 770
DB 739 ATCCGTCTTAAACTTCTATATTCAGACATTCGGAAAAA 779
```

```
RESULT 5
US-09-621-976-12605
; Sequence 12605, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jober, S.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621, 976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 12605
; LENGTH: 377
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-621-976-12605
```

```
Query Match 19.3%; Score 173.4; DB 4; Length 377;
Best Local Similarity 83.7%; Pred. No. 1.4e-44;
Matches 195; Conservative 1; Mismatches 37; Indels 0; Gaps 0;
```

```
QY 1 ATGAGACATTTGGATGCGGCTCAGTCCCTATTTCAAGGCGCTTGGGCGCCGAGAT 60
DB 144 ATGAGACATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 203
QY 61 ACAAGATCAAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 120
DB 204 ACTAGAGTAAAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 263
QY 121 ATTACTTACTATTTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 180
DB 264 ATATATTACTATTTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 323
QY 181 TGCCGAGGATCCCTGAGTTGATATACCTTGGACACCTGCTGCTCTCTA 233
DB 324 TGCCGGGAGATTTTACTGCTGATTAASCTTGACCTCAGCTGCTCTCTCTA 376
```

```
RESULT 6
US-09-149-476-258
; Sequence 258, Application US/09149476
; Patent No. 6420526
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P1
; CURRENT APPLICATION NUMBER: US/09/149,476
; EARLIER FILING DATE: 1998-09-08
; EARLIER APPLICATION NUMBER: PCT/US98/04493
; EARLIER FILING DATE: 1998-03-06
; EARLIER APPLICATION NUMBER: 60/040,162
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,333
```

```
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/038,621
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,626
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,334
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,336
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,163
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/047,600
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,615
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,597
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,502
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,633
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,583
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,617
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,618
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,503
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,592
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,581
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,584
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,500
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,587
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,492
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,598
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,613
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,582
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,596
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,612
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,632
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,601
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,580
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,568
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,314
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,569
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,311
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,671
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,674
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,669
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,312
EARLIER FILING DATE: 1997-04-11
```

EARLIER APPLICATION NUMBER: 60/043,313
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/043,672
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/043,315
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/048,974
 EARLIER FILING DATE: 1997-06-06
 EARLIER APPLICATION NUMBER: 60/056,886
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,877
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,889
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,893
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,630
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,878
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,662
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,872
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,882
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,637
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,903
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,888
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,879
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,880
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,894
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,911
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,636
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,874
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,910
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,864
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,631
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,845
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,892
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/057,761
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/047,595
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,599
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,588
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,585
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,586
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,590
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,594
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,589
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,593

EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,614
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/043,578
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/043,576
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/047,501
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/043,670
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/056,632
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,664
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,876
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,881
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,909
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,875
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,862
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,887
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,908
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/048,964
 EARLIER FILING DATE: 1997-06-06
 EARLIER APPLICATION NUMBER: 60/057,650
 EARLIER FILING DATE: 1997-09-05
 EARLIER APPLICATION NUMBER: 60/056,884
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/057,669
 EARLIER FILING DATE: 1997-09-05
 EARLIER APPLICATION NUMBER: 60/049,610
 EARLIER FILING DATE: 1997-06-13
 EARLIER APPLICATION NUMBER: 60/061,060
 EARLIER FILING DATE: 1997-10-02

Query Match 15.3%; Score 137.6; DB 4; Length 1482;
 Best Local Similarity 57.0%; Pred. No. 5.4e-33;
 Matches 292; Conservative 0; Mismatches 214; Indels 6; Gaps 2;

131 TCATTGATGCTGGAGCAAAATACATGAGAACGGACCGCTTCTTGGCGAGGCA 190
 215 TCGTTCTCTACCTTGGGCTCGGATGATGCTAATGGAAGCCCTTCAGCTCGTGGCT 274
 191 TCTGCACTGTATTAACCTTGGACTACCCCTGCTGTCTCTATCAATGTTAAGATTGG 250
 275 TCATGATGTTGTACAACTTCTCACTGTGTGACCTCTCCCTATGTTGATGAGATTCC 334
 251 TGACAGGTGTGGAGGGCAAAATACAACTTTTCTG---CCAGGGAACGAGGCGCG 307
 335 TGAATGCGAGCTGTGAGCACTATACCTGGGCTGTATCCTGTGAGATATTCACA 394
 308 GAGATCCGATATGAAGATCAATCCGCTCTGTGTGATGACTAATTTCCAAATCATGG 367
 335 GCCCGAGGCACTTAGATGAGTGGGTGGGCTGGCTCTTCTTCCAAATTTATGG 454
 368 AATTCATGAGACCTTTTCTTCTATCCTTGGCAAGAACCAACGATCAGCGTCTCC 427
 455 AGCTGATGACACAGTATCTTATTTCTCGAAGAAAGCGGAGGAGTACCTTCTCTAC 514
 428 ATGTCTACCAACGCTACCACTGCTCAACATGTGTGTTGTGATGAACGTGGTTCCT 487
 515 ATGTCTTCAACCACTGTGTGCTTCCCTGAGGCTGTGTGGGGGTAAAGATTGCCCG 574
 488 GCGGCAATTCATATTTTGTGTGCGACATCAACAGCTTCAATCCATGCTCATGATCCGT 547
 575 GAGGAATGGCTCTTCCATGCGATGAATAACTTCTCGTGAATGATATATGATCTGT 634

QY 548 ACTATGCTCTGCTCTCAT---CCGCTCATGCGTCCCTACTCTGCTGAAAAGTACA 604
DB 635 ACTACGATTATATGCTTGGCTTGGCCGTCACCAACCCACTTGGTGGAAGACACA 694
QY 605 TCACTCAAGGCGAGCTGTGCTCAGTTGTCTG 636
DB 695 TGAAGCATTCAGCTGATCGACTGTCTCTG 726

RESULT 7
US-09-149-476-106
; Sequence 106, Application US/09149476
; Patent No. 6420526
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P1
; CURRENT APPLICATION NUMBER: US/09/149,476
; EARLIER FILING DATE: 1998-09-08
; EARLIER APPLICATION NUMBER: PCT/US98/04493
; EARLIER FILING DATE: 1998-03-06
; EARLIER APPLICATION NUMBER: 60/040,162
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,333
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/038,621
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,626
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,334
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,336
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,163
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/047,600
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,615
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,597
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,502
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,633
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,583
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,617
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,618
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,503
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,592
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,581
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,584
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,500
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,567
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,492
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,588
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,613
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,582
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,596

EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,612
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,632
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,601
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,580
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,568
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,314
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,569
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,311
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,671
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,674
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,669
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,312
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,313
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,672
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,315
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/048,974
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/056,886
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,877
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,889
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,893
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,630
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,878
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,662
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,872
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,882
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,637
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,903
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,888
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,879
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,880
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,894
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,911
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,636
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,874
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,910
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,864
EARLIER FILING DATE: 1997-08-22

EARLIER APPLICATION NUMBER: 60/056,631
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,845
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,892
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/057,761
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/047,595
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,599
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,588
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,585
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,586
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,590
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,594
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,589
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,593
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/047,614
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/043,578
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/043,576
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/047,501
 EARLIER FILING DATE: 1997-05-23
 EARLIER APPLICATION NUMBER: 60/043,670
 EARLIER FILING DATE: 1997-04-11
 EARLIER APPLICATION NUMBER: 60/056,632
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,664
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,876
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,881
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,909
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,875
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,862
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,887
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/056,908
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/048,964
 EARLIER FILING DATE: 1997-05-06
 EARLIER APPLICATION NUMBER: 60/057,650
 EARLIER FILING DATE: 1997-09-05
 EARLIER APPLICATION NUMBER: 60/056,884
 EARLIER FILING DATE: 1997-08-22
 EARLIER APPLICATION NUMBER: 60/057,669
 EARLIER FILING DATE: 1997-09-05
 EARLIER APPLICATION NUMBER: 60/049,610
 EARLIER FILING DATE: 1997-06-13
 EARLIER APPLICATION NUMBER: 60/061,060
 EARLIER FILING DATE: 1997-10-02

Query Match 15.3%; Score 137.6; DB 4; Length 1542;
 Best Local Similarity 57.0%; Pred. No. 5.5e-33;
 Matches 292; Conservative 0; Mismatches 214; Indels 6; Gaps 2;

131 TCATTGATGCTGGACCAAAATACATGAAGAACCGGACGCTTCTTCTCCGAGGCA 190

243 TCGTCTCTCACTTGGGCTCGCATCATGCTTAATCGAAGCCCTTCCAGCTCCGTGCT 302
 191 TCCGCACTGATTAACCTTGACATCAACCCCTGCTCTCTAATGTTATGATGG 250
 303 TCATGATGTCCTACACTTCTACATGATGACATCTTCTCTACATTTGATGATTC 362
 251 TGACAGATGTCGAGGAGGCAATATACATTTTCTG---CCAGGAAACAGCAGCGGG 307
 363 TGATGTCGGGCTGGCTGAGCACTATACCTGGGGGCTGACCTGTGACATTCACA 422
 308 GAGATCCGATATGAAGATATCCGCTCTCTGTGTGATCACTTCTTCAACATG 367
 423 GCGCTGAGCACTGATGATGTCGGGCTGCTCTCTCTCTCTCTCTCTCTCTCTCT 482
 368 AATCATGACACCTTTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 427
 483 AGCTGATGACACAGTATCTTTATCTCTGAAAGAAACGGGCGAGGACCTTCTTAC 542
 428 ATGTCTACCAACAGCTACCATCTCAACATCTGTGTTTGTATGAACCTGGCTTCC 487
 543 ATGCTTCCATCACTCTGTCCTTCCCTGAGGCTGTGTGGGGGATTAAGATTCGCC 602
 488 GCGGCACTGATATTTTGTGGGACACTCAAGCTTCATTCATGCTCTCATGTCTGT 547
 603 GAGGATGAGCTCTTTCATGATCATTAATCTTCTCTGATGATGATGATGATGAT 662
 548 ACTATGCT 604
 663 ACTAGGATTTATCTGCTTGTGCTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 722
 605 TCATCAAGGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 636
 723 TGACAGCCATTCAGCTGATTCAGATTTGCTGTG 754

RESULT 8
 US-09-023-655-430
 Sequence 430, Application US/09023655
 Patent No. 6607879
 GENERAL INFORMATION:
 APPLICANT: Cocks, Benjamin G.
 APPLICANT: Susan G. Stuart
 APPLICANT: Jeffrey J. Sellhammer
 TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
 NUMBER OF SEQUENCES: 1508
 CORRESPONDENCE ADDRESS:
 ADDRESS: INCYTE PHARMACEUTICALS, INC.
 STREET: 3174 PORTER DRIVE
 CITY: PALO ALTO
 STATE: CALIFORNIA
 COUNTRY: USA
 ZIP: 94304
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/023,655
 FILING DATE: HEREMITH
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Zeller, Karen J.
 REGISTRATION NUMBER: 37,071
 REFERENCE/DOCKET NUMBER: PA-0001 US
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (650) 855-0555
 TELEFAX: (650) 845-4166

```

; INFORMATION FOR SEQ ID NO: 430:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 1812 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
; IMMEDIATE SOURCE:
;   LIBRARY: URETTU01
;   CLONE: 1658706
US-09-023-655-430

```

```

Query Match      15.3%; Score 137.6; DB 4; Length 1812;
Best Local Similarity 57.0%; Pred. No. 6.1e-33;
Matches 292; Conservative 0; Mismatches 214; Indels 6; Gaps 2;

```

```

QY 131 TCATTGATGCTGGGACCAAAATACATGAAGACGAGCGCTCTCTTCCGAGACA 190
DB 570 TCGTCTCTCACTTGGGCTCGCATATGGCTATATGAAGCCCTTCCAGCTCCGAGCT 629
QY 191 TCCTGCAATTGTATTAACCTTGAATCAACCTGCTCTCTCTACATGTTCTATGAGTTGG 250
DB 630 TCATGATTGTCTACAACTTCTCACTGAGCACTTCCCTCTACATGTTCTATGAGTTCC 689
QY 251 TGACAGGTGTGTGGAGGCGAAATACACTTTTCTG---CGAGGAACAGCGAGCGGG 307
DB 690 TGATGTGGGCTGGCTGAGCACTATACCTGGGCTGTGACCCCTGTGACTATTTCACACA 749
QY 308 GAGATCCGATATGAAAGATCATCCGCGTCTCTGTGAGTACTTCTTCCAACTCATCG 367
DB 750 GCCCTGAGCACTTATGATGTGTGGGTGGCGCTGCTCTCTCTTCCAACTCATG 809
QY 368 AATTCATGACACCTTTTCTTCACTCTTGTGCAAGAACACACACACATCAGCTGCTCC 427
DB 810 AGCTGATGAGACAGATGATCTTATTTCTCGAAAGAAACAGGAGTGAACCTTCTTAC 869
QY 428 ATGCTACCAACGAGCTACCATCTCAACATCTGAGTGTGTTGATGAGTGGTTCCCT 487
DB 870 ATGCTTCCATCACTCTGAGCTTCTCTGAGCTGTGAGTGGGAGTAAAGATTGCCCGG 929
QY 488 GCGGCATTCATATTTTGTGTCGACACTCAACAGCTTCACTCATGTCCTCATGTAATGCT 547
DB 930 GAGGATGGGCTCTTTCATGATGATGATTAAGCTTCCGTGATGATGATGATGATGCT 589
QY 548 ACTATGCTGTCTCTCAT---CCGCTCATGAGTGTGCTTCTGTTGAGAAATGACA 604
DB 990 ACTAGGATTAATGCTTGTGGCTCTGTGACACACCTTACCTTGTGAGAAAGACACA 1049
QY 605 TCACTCAAGGACAGCTGTCCAGTTTGTGCTG 636
DB 1050 TGACAGCCATTTCAGCTGATTCAGTTTGTGCTG 1081

```

RESULT 9
US-09-903-456-7

```

; Sequence 7, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116

```

```

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
US-09-903-456-7

```

```

Query Match      14.2%; Score 127.4; DB 4; Length 819;
Best Local Similarity 52.7%; Pred. No. 6.1e-30;
Matches 325; Conservative 0; Mismatches 286; Indels 6; Gaps 2;

```

```

QY 157 ATGAGAACCGGACCGCTTCTCTTCCGAGGATCTCTGCACTGTATTAACCTTGACTC 216
DB 181 AAGCAATGAGAAAGCTTTTGAAGCTTCAAGCAATCAAGCTTTCACAACTTGTCTC 240
QY 217 ACCGCTCTCTCTCTACATGTTCTATGAGTTGGAGACAGGTGTGTGGAGGCAAAATAC 276
DB 241 TTGGACCTTCTCTTGTACATGTGCTGAGACATCCGCGAGCTATCTCGAGGCTTAC 300
QY 277 AACTTTTCTGCAAGGAAACAGCAGCGGAGAAATCCATATGAGATCAT---CCGC 333
DB 301 AAGGTGTTGAAACGACATGAGAGGCAACGATCTCATGTCTCAGGCGATGTCTGCG 360
QY 334 GTCTCTGTGTACTTCTTCCAACTCATTCATTCATGACACCTTTTGTATC 393
DB 361 ATGCTGTAGTGTCTTACGTCTCAAGCATACGATGTTCTTGATATCCGCAATGATC 420
QY 394 CTTCGAAACACACACACAGATCACCGTGTCTCATGTCTTACCAACAGCTTACATGCTC 453
DB 421 CTTCGAAACATTCACACAGGTTCTTCTTGTGATGTATACACATGACACCATTTT 480
QY 454 AACATGTGTGTGTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATG 513
DB 481 GCCATCTGTGTGTGTGTATGATGATGATGATGATGATGATGATGATGATGATGATG 540
QY 514 CTCAACAGTTCATCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 573
DB 541 CTCACTCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
QY 574 ATGCTCTCTTACCTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 633
DB 601 GGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 657
QY 634 CTGACATATATCAACACACAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 693
DB 658 GCAATGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 717
QY 694 CTGTTCTTCAGATTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 753
DB 718 GTGACAGCTCTTGAAGTGTATGATGATGATGATGATGATGATGATGATGATGATGATG 777
QY 754 CAGACTTACACAAAGA 770
DB 778 CAGAGCTATCTTAAAAA 794

```

RESULT 10
US-09-903-456-71

```

; Sequence 71, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095

```

PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO: 71
 LENGTH: 818
 TYPE: DNA
 ORGANISM: Thraustochytrium aureum
 US-09-903-456-71

Query Match 13.8%; Score 124.2; DB 4; Length 818;
 Best Local Similarity 52.4%; Pred. No. 6,2e-29;
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACGGGACCCGCTCTCTTCCGAGGACCTCTGAGTTGTAACCTTGACTC 216
 Db 180 AAGCAGATGAGGAAGCCCTTTGAGCTCAAGCCTCAAGCTCTTGACACAACCTGTTCTC 239
 QY 217 ACCCTGCTGCTCTCTACATGTTCTATGAGTTGAGCAGATGAGTGGAGGCAATAC 276
 Db 240 TTGGACCTTCTCTGTACATGCTGTGAGAACCATCCGCAAGCTATCTCGAGGCTAC 299
 QY 277 AACTTTTCTGCCAGGAAACGACGCGGGAGATCCGATATGAAGATCAT--CCGC 333
 Db 300 AAAGTTTGAAGACGATGAGAGAGGCAACGAGCTCATGCTCAGGGCATGTCTCGC 359
 QY 334 GTCCTGTGTGTACTACTTCTCCAACTCATGAAATTCAAGACCTTTTCTTCATC 393
 Db 360 ATCGTAGTGTGTGTACTGTCCAGGACATACAGTCTTGTGATACCGCATCATGATC 419
 QY 394 CTTGCAAGAACCAACCAAGATACAGGCTGCTCATGTCTACACCAAGCTACATGCTC 453
 Db 420 CTTGCAAGAGTTTCAACCAAGTTCTCTTGTGAATGACCAACCACTGCAACATTTT 479
 QY 444 AACATCTGTGTGTGTGTATGATCTGGGTTCCCTGCGGCAATTCATATTTTGTGACA 513
 Db 480 GCCATCTGTGTGTGTGTATGATCTGGGTTCCCTGCGGCAATTCATATTTTGTGACA 539
 QY 514 CTCACAGCTTCATCATGATCTCTCATGATCTGATGATGATGATGATGATGATGATG 573
 Db 540 CTCACAGCTTCATCATGATCTCTCATGATCTGATGATGATGATGATGATGATGATG 599
 QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCACTCAAGGCAAGCTGTCAAGTTGTG 633
 Db 600 GGGTTCGTAAGCCA--ATCAAGCCGTACATCAACCACTTCAGATGACCCAGGCTTC 656
 QY 634 CTGAATATCATCCAGACACTTGGGGGCTTCTGGCATGCTCTTCCCTTCGGGTGG 693
 Db 657 GCATGCTGT 716
 QY 694 CTGTTCTTCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 753
 Db 717 GTGCAAGCTTCTTGGAGTATCATGATCACTGCTTCCCATGCACTACCCACAGGCTCTT 776
 QY 754 CAGACTTACACAGAA 770
 Db 777 CAGAGCTATCTTAAAAA 793

RESULT 11
 US-09-903-456-69
 Sequence 69, Application US/09903456
 Patent No. 6677145
 GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Leonard, Amanda Eun-Yeong
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 FILE REFERENCE: 6407 US.P3
 CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24
 PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 116
 SOFTWARE: FASTSEQ for Windows Version 4.0
 SEQ ID NO: 69
 LENGTH: 819
 TYPE: DNA
 ORGANISM: Thraustochytrium aureum
 US-09-903-456-69

Query Match 13.8%; Score 124.2; DB 4; Length 819;
 Best Local Similarity 52.4%; Pred. No. 6,2e-29;
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACGGGACCCGCTCTCTTCCGAGGACCTCTGAGTTGTAACCTTGACTC 216
 Db 181 AAGCAGATGAGGAAGCCCTTTGAGCTCAAGCCTCAAGCTCTTGACACAACCTGTTCTC 240
 QY 217 ACCCTGCTGCTCTCTACATGTTCTATGAGTTGAGCAGATGAGTGGAGGCAATAC 276
 Db 241 TTGGACCTTCTCTGTACATGCTGTGAGAACCATCCGCAAGCTATCTCTCGAGGCTAC 300
 QY 277 AACTTTTCTGCCAGGAAACGACGCGGGAGATCCGATATGAAGATCAT--CCGC 333
 Db 301 AAAGTTTGAAGACGATGAGAGAGGCAACGAGCTCATGCTCAGGGCATGTCTCGC 359
 QY 334 GTCCTGTGTGTACTACTTCTCCAACTCATGAAATTCAAGACCTTTTCTTCATC 393
 Db 361 ATCGTAGTGTGTGTACTGTCCAGGACATACAGATCTTGTGATACCCCATCATGATC 420
 QY 394 CTTGCAAGAACCAACCAAGATACAGGCTGCTCATGATGATGATGATGATGATGATG 453
 Db 421 CTTGCAAGAGTTTCAACCAAGTTCTCTTGTGATGATGATGATGATGATGATGATG 480
 QY 444 AACATCTGTGTGTGTGTATGATCTGGGTTCCCTGCGGCAATTCATATTTTGTGACA 513
 Db 481 GCCATCTGTGTGTGTGTATGATCTGGGTTCCCTGCGGCAATTCATATTTTGTGACA 540
 QY 514 CTCACAGCTTCATCATGATCTCTCATGATCTGATGATGATGATGATGATGATGATG 573
 Db 541 CTCACAGCTTCATCATGATCTCTCATGATCTGATGATGATGATGATGATGATGATG 600
 QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCACTCAAGGCAAGCTGTCAAGTTGTG 633
 Db 601 GGGTTCGTAAGCCA--ATCAAGCCGTACATCAACCACTTCAGATGACCCAGGCTTC 657
 QY 634 CTGAATATCATCCAGACACTTGGGGGCTTCTGGCATGCTCTTCCCTTCGGGTGG 693
 Db 658 GCATGCTGT 717
 QY 694 CTGTTCTTCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 753
 Db 718 GTGCAAGCTTCTTGGAGTATCATGATCACTGCTTCCCATGCACTACCCACAGGCTCTT 777
 QY 754 CAGACTTACACAGAA 770
 Db 778 CAGAGCTATCTTAAAAA 794

RESULT 12
 US-09-903-456-70
 Sequence 70, Application US/09903456
 Patent No. 6677145
 GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Leonard, Amanda Eun-Yeong
 APPLICANT: Huang, Yung-Sheng

```

; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 70
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
; US-09-903-456-70

```

```

Query Match      13.8%; Score 124.2; DB 4; Length 819;
Best Local Similarity 52.4%; Pred. No. 6.2e-29;
Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

```

```

QY 157 ATGAAGAACCGGACCGCTTCTTGGCCGAGCATCTGCACTGTATACCTTGACTC 216
DB 181 AACGAGATGAGAGACCTTTTGAGCTCAAGACCATCAAGCTTTCACAACTGTTCTC 240
QY 217 ACCCTGCTCTCTACATGTTCTATGATGTTGAGACAGAGTGTGGAGGGAATAC 276
DB 241 TTGGACATTTCTTGTACATGTCGTGAGACCATCCGACGCTATCTTGAGAGCTAC 300
QY 277 AACTTTTTCGACGAGGAACAGCAGCGCGGAGATCGATATGAGATCAT--CCGC 333
DB 301 AAGGTGTTGGAAGACATGAGAGGGAAGGCAACAGTCTCATGCTCAAGGATGCTCGC 360
QY 334 GTCTCTGTGTGACTACTTTCCAACTCATGATCATGAGACCTTTTCTTCATC 393
DB 361 ATGTGTAGCGCTTCTACATGTCGTCAGGCAATCGAGTTCTTGATACCGCATATGATC 420
QY 394 CTTCGCAAGAACACACAGAGATCACCGTGTCTCAATGCTACACACAGCTACATGCTC 453
DB 421 CTTTGCAAGAGATTCACAGAGTTCTTCTTGCAATGATGACCAACCAATTTT 480
QY 454 AACATCTGTGTGTGTGATGAACGTGGTTCCTCGCGCATTCATATTTGTGACACA 513
DB 481 GCCATCTGTGTGGCTATCGCCAAAGTACGCCGAGAGGTGATGCGTACTTTTCAGTATC 540
QY 514 CTCAACAGCTTCATCATGTCCTCATGATCTGTATGCTGTCTTCATCCGCTCC 573
DB 541 CTCAACTCTTTCTGTGACACCGTATGTCGATGCACTTCTTCTCCCAAGGCTTC 600
QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCAAGGACAGCTGTCAGTTGTG 633
DB 601 GGGTGTGTGAAGC--CAATCAAGCGGTACATCAACCCCTTCAGATGACCAAGTATG 657
QY 634 CTGACATATATCCAGACAGCTCGCGGCTTCTGCGCATGCTCTTCCCTGTGGGTG 693
DB 658 GCAATGCTGTGTGAGTCTTGTACGACTCTTCCATGTGAGATACCAAGGCTCTT 717
QY 694 CTGTCTTCAGATTGATATGATTTCCCTGATGTCTCTTCAAACTTCTATAT 753
DB 718 GTGACGTTCTTGGATGTATGATGATCACTTGCTTGCCCTTTCGGAACTTTTGTG 777
QY 754 CAGACTTACACAGAA 770
DB 778 CAGAGCTATCTTAAAAA 794

```

```

RESULT 13
US-09-903-456-72
; Sequence 72, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:

```

```

; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 72
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
; US-09-903-456-72

```

```

Query Match      13.8%; Score 124.2; DB 4; Length 819;
Best Local Similarity 52.4%; Pred. No. 6.2e-29;
Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

```

```

QY 157 ATGAAGAACCGGACCGCTTCTTGGCCGAGCATCTGCAAGTTGATTAACCTTGACTC 216
DB 181 AAGCAATGAGAAACCTTTTGAGCTCAAGCATCAAGCTTTCACAACTGTTCTC 240
QY 217 ACCCTGCTCTCTACATGTTCTATGATGTTGAGACAGAGTGTGGAGGGAATAC 276
DB 241 TTGGACATTTCTTGTACATGTCGTGAGACCATCCGACGCTATCTTGAGAGCTAC 300
QY 277 AACTTTTTCGACGAGGAACAGCAGCGCGGAGATCGATATGAGATCAT--CCGC 333
DB 301 AAGGTGTTGGAAGACATGAGAGGGAAGGCAACAGTCTCATGCTCAAGGATGCTCGC 360
QY 334 GTCTCTGTGTGACTACTTTCCAACTCATGATCATGAGACCTTTTCTTCATC 393
DB 361 ATGTGTAGTGTGTGTGATGAACGTGGTTCCTCGCGCATTCATATTTGTGACACA 513
QY 394 CTTCGCAAGAACACACAGAGATCACCGTGTCTCAATGCTACACACAGCTACATGCTC 453
DB 421 CTTTGCAAGAGATTCACAGAGTTCTTCTTGCAATGATGATGCAACATGCGACGTTT 480
QY 454 AACATCTGTGTGTGTGATGAACGTGGTTCCTCGCGCATTCATATTTGTGACACA 513
DB 481 GCCATCTGTGTGGCTATCGCCAAAGTACCGCTCAAGAGGTGATGCTACTTTTCAGTATC 540
QY 514 CTCAACAGCTTCATCATGTCCTCATGATCTGTATGCTGTCTTCATCCGCTCC 573
DB 541 CTCAACTCTTTGTGACACCGTATGTCGATGCACTTCTTCTCCCAAGGCTTC 600
QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCAAGGACAGCTGTCAGTTGTG 633
DB 601 GGGTGTGTGAAGC--ATCAAGCGGTACATCAACCCCTTCAGATGACCAAGTATG 657
QY 634 CTGACATATATCCAGACAGCTCGCGGCTTCTGCGCATGCTCTTCCCTGTGGGTG 693
DB 658 GCAATGCTGTGTGAGTCTTGTACGACTCTTCCATGTGAGATACCAAGGCTCTT 717
QY 694 CTGTCTTCAGATTGATATGATTTCCCTGATGTCTCTTCAAACTTCTATAT 753
DB 718 GTGACGTTCTTGGATGTATGATGATCACTTGCTTGCCCTTTCGGAACTTTTGTG 777
QY 754 CAGACTTACACAGAA 770
DB 778 CAGAGCTATCTTAAAAA 794

```

```

RESULT 14

```

US-09-903-456-73
 ; Sequence 73, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407.US.P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FASTSEQ for Windows Version 4.0
 ; SEQ ID NO 73
 ; LENGTH: 819
 ; TYPE: DNA
 ; ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-73

Query Match 13.8%; Score 124.2; DB 4; Length 819;
 Best Local Similarity 52.4%; Pred. No. 6.2e-29;
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACCGGACCGCTTCTTGGCGAGCATCTGAGTTGATTAACCTTGACATC 216
 DB 181 AAGAGATGAGAGACCTTTGAGCTCAAGACATCAAGCTTGGACAACCTGTTCTC 240
 QY 217 ACCCTGCTCTCTCTACAGTTTATAGTGTGGTACAGGTGTGGAGGCAATAC 276
 DB 241 TTGGACTTCTCTGATAGTGTGGAGACCATCCGCGAGCTATCTCGAGGCTAC 300
 QY 277 AACTTTTCTCCAGGAGACACGACGCGGAGAAATCCGATATGAATCAT---CCGC 333
 DB 301 AAAGTGTGGAACGACATGAGAGAGGCAAGAGCTCATGTCTGAGGCAATGTCTGC 360
 QY 334 GTCTCTGTGTGTCTACTTCTTCCAAATCATGAAATTCATGACACTTTTCTTCATC 393
 DB 361 ATCGTACGCTGTCTACGTGTCCAGGACATACAGATTCCTTGATACCGCATCATGATC 420
 QY 394 CTTCGCAAGAACACACACAGATCACCGTCTCATGTCTACACACGCTACCATGCTC 453
 DB 421 CTTCGCAAGAGTTCAACCAAGTTTCTTCTTGATGCAACCAACATGCCACATTTT 480
 QY 454 AACATCTGTGTGTGTGTGATGAACTGGGTTCCCTGCGGCAATTAATTTTGTGCGACA 513
 DB 481 GCCATCTGTGGGCTATGCGCAAGTACGCTTCAGAGAGTATCGTACTTTTCAATGATC 540
 QY 514 CTCAACAGCTTCAATCCATGCTCATGCTACCTGATGCTGTGCTGCTCCATCCGCTGC 573
 DB 541 CTCAACTCTTGTGACACACCGTATATGACATCACTTCTTCTTCTCCCAAGGCTTC 600
 QY 574 ATGGCTCCCTACTCTGTGTGGAAGAAAGTACATCACTCAAGGAGCTGTGCTCAAGTTGTG 633
 DB 601 GGGTGTGGAAGCA---ATCAAGCGTATACATCAACCGTTCAATGACCAAGGCTCATG 657
 QY 634 CTGACATCATCCAGAGACCTGGGGGCTTCTTGCGCATGCTTCCTCTCGGGTGG 693
 DB 658 GCAATGCTTGTGACAGCTTGTGTACATCACTTCCAGTACACATCAACCAAGGCTCTT 717
 QY 694 CTGTTCTTCAGATGATGATGATGATTTCCGTGATGCTCTTCAAACTTCATATT 753
 DB 718 GTGACGCTTCTTGAAGTGTACATCACTTGTGCTTCTTCCGCAACTTTTGTG 777
 QY 754 CAGACTTACAAACAGAA 770

DB 778 CAGAGCTATCTTAAAAA 794

RESULT 15
 US-09-903-456-74
 ; Sequence 74, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407.US.P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FASTSEQ for Windows Version 4.0
 ; SEQ ID NO 74
 ; LENGTH: 819
 ; TYPE: DNA
 ; ORGANISM: *Thraustochytrium aureum*
 US-09-903-456-74

Query Match 13.8%; Score 124.2; DB 4; Length 819;
 Best Local Similarity 52.4%; Pred. No. 6.2e-29;
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACCGGACCGCTTCTTGGCGAGCATCTGAGTTGATTAACCTTGACATC 216
 DB 181 AAGAGATGAGAGACCTTTGAGCTCAAGACATCAAGCTTGGACAACCTGTTCTC 240
 QY 217 ACCCTGCTCTCTCTACAGTTTATAGTGTGGTACAGGTGTGGAGGCAATAC 276
 DB 241 TTGGACTTCTCTGATAGTGTGGAGACCATCCGCGAGCTATCTCGAGGCTAC 300
 QY 277 AACTTTTCTCCAGGAGACACGACGCGGAGAAATCCGATATGAATCAT---CCGC 333
 DB 301 AAAGTGTGGAACGACATGAGAGAGGCAAGAGCTCATGTCTGAGGCAATGTCTGC 360
 QY 334 GTCTCTGTGTGTGTGTGATGAACTGGGTTCCCTGCGGCAATTAATTTTGTGCGACA 393
 DB 361 ATCGTACGCTGTCTACGTGTCCAGGACATACAGATTCCTTGATACCGCATCATGATC 420
 QY 394 CTTCGCAAGAACACACACAGATCACCGTCTCATGTCTACACACGCTACCATGCTC 453
 DB 421 CTTCGCAAGAGTTCAACCAAGTTTCTTCTTGATGCAACCAACATGCCACATTTT 480
 QY 454 AACATCTGTGTGTGTGTGATGAACTGGGTTCCCTGCGGCAATTAATTTTGTGCGACA 513
 DB 481 GCCATCTGTGGGCTATGCGCAAGTACGCTTCAGAGAGTATCGTACTTTTCAATGATC 540
 QY 514 CTCAACAGCTTCAATCCATGCTCATGCTACCTGATGCTGTGCTGCTCCATCCGCTGC 573
 DB 541 CTCAACTCTTGTGACACACCGTATATGACATCACTTCTTCTTCTCCCAAGGCTTC 600
 QY 574 ATGGCTCCCTACTCTGTGTGGAAGAAAGTACATCACTCAAGGAGCTGTGCTCAAGTTGTG 633
 DB 601 GGGTGTGGAAGCA---ATCAAGCGTATACATCAACCGTTCAATGACCAAGGCTCATG 657
 QY 634 CTGACATCATCCAGAGACCTGGGGGCTTCTTGCGCATGCTTCCTCTCGGGTGG 693
 DB 658 GCAATGCTTGTGACAGCTTGTGTACATCACTTCCAGTACACATCAACCAAGGCTCTT 717
 QY 694 CTGTTCTTCAGATGATGATGATGATTTCCGTGATGCTCTTCAAACTTCATATT 753

Db 718 GTGAGCTTCTTGAGGTGACATGATCACTTGCCCTTTGGCACTTTTGTG 777
OY 754 CAGACTTACACAGAA 770
Db 778 CAGAGCTATCTTAAAA 794

Search completed: April 1, 2004, 08:25:30
Job time : 82.4384 secs


```

Db      61 CCAAGAGATTCGAGTTGCGGGGTGTTCTGCTGAGACTCTTACCTTCCACCTTATC 120
Qy      121 CTCACCATCAGCTACCTGCTCTGATATGCTGGGTAAACAATCATGAAAGAGGCT 180
Db      121 CTCACCATCAGCTACCTGCTCTGATATGCTGGGTAAACAATCATGAAAGAGGCT 180
Qy      181 GCTGTGCTCTCAGGGGAGCTCTCACTTGTATTAACCTGCAATCACTTTCTTCCG 240
Db      181 GCTGTGCTCTCAGGGGAGCTCTCACTTGTATTAACCTGCAATCACTTTCTTCCG 240
Qy      241 TATATGCTGAGTGAAGTCACTCTCCAGCTGGGAGAGGTTACAATGCACTGAGTCA 300
Db      241 TATATGCTGAGTGAAGTCACTCTCCAGCTGGGAGAGGTTACAATGCACTGAGTCA 300
Qy      301 AATCTGACAGTGCAGAGAGAGTATGTCGGGTAGCCAGGTCTTGTGGTATAC 360
Db      301 AATCTGACAGTGCAGAGAGAGTATGTCGGGTAGCCAGGTCTTGTGGTATAC 360
Qy      361 TTCTCCAACTAGTGAAGTCTCTGAGACAGATTTCTTTGTTACGAAAAAGACCAAT 420
Db      361 TTCTCCAACTAGTGAAGTCTCTGAGACAGATTTCTTTGTTACGAAAAAGACCAAT 420
Qy      421 CAGATCAGCTTCTCTCATGCTATCACACGCTGCATGTTCAACATCTGGTGTGT 480
Db      421 CAGATCAGCTTCTCTCATGCTATCACACGCTGCATGTTCAACATCTGGTGTGT 480
Qy      481 TTGAACCTGATACCTTGTGTCAAAAGCTTTTGTGAGCCACCTGAAACAGCTTATAC 540
Db      481 TTGAACCTGATACCTTGTGTCAAAAGCTTTTGTGAGCCACCTGAAACAGCTTATAC 540
Qy      541 ATTCTCATGTAATCTGCTACAGGCTGCTGTGTTCCGCTCATGACCAAGTACCTTTG 600
Db      541 ATTCTCATGTAATCTGCTACAGGCTGCTGTGTTCCGCTCATGACCAAGTACCTTTG 600
Qy      601 TGAAGAAAGTACCTCAACAAGGCTCAGTGTGAGTGTGATCACTCAACATCAGCAGC 660
Db      601 TGAAGAAAGTACCTCAACAAGGCTCAGTGTGAGTGTGATCACTCAACATCAGCAGC 660
Qy      661 CTGAGTGCCTGTGTGAAGCCCTGTGGCTTCCCTTTGGCTGTCTCACTTCCAGTCTTC 720
Db      661 CTGAGTGCCTGTGTGAAGCCCTGTGGCTTCCCTTTGGCTGTCTCACTTCCAGTCTTC 720
Qy      721 TATATGATGACCTGCTCATCTCTTCTTAACTTATTCAGACATACCGAAAAAG 780
Db      721 TATATGATGACCTGCTCATCTCTTCTTAACTTATTCAGACATACCGAAAAAG 780
Qy      781 CCAAGTGAAGAAAGAGCTGCAGAGAAAGAGTGAAGTGTTCCTCCAAAGCCACTTA 840
Db      781 CCAAGTGAAGAAAGAGCTGCAGAGAAAGAGTGAAGTGTTCCTCCAAAGCCACTTA 840
Qy      841 ATTGTGGCTAATGGCATGACGAGCAAGAAAGGCTCAATTA 879
Db      841 ATTGTGGCTAATGGCATGACGAGCAAGAAAGGCTCAATTA 879

```

RESULT 2
US-09-849-199A-22

; Sequence 22, Application US/09849199A
; Publication No. US20030082754A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Thurmond, Jennifer M.
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
; FILE REFERENCE: 6804 US 01
; CURRENT APPLICATION NUMBER: US/09/849,199A
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 22

```

; LENGTH: 879
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-849-199A-22
Query Match      100.0%; Score 879; DB 10; Length 879;
Beet Local Similarity 100.0%; Pred. No. 6,6e-282;
Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 ATGAGAGAGCTGAAGGCTTGTATTAAGAGTCAATGCTTCTTGACCAAGTGTGA 60
Db      1 ATGAGAGAGCTGAAGGCTTGTATTAAGAGTCAATGCTTCTTGACCAAGTGTGA 60
Qy      61 CCAAGAGATTCGAGTTCGAGGAGGCTTCTGAGCTCTTACCTTCCACTTCATC 120
Db      61 CCAAGAGATTCGAGTTCGAGGAGGCTTCTGAGCTCTTACCTTCCACTTCATC 120
Qy      121 CTCACCATCAGTACCTGCTCTGATATGCTGGGTAAACAATCATGAAAGAGGCT 180
Db      121 CTCACCATCAGTACCTGCTCTGATATGCTGGGTAAACAATCATGAAAGAGGCT 180
Qy      181 GCTGTGCTCTCAGGGGAGCTCTCACTTGTATTAACCTGCAATCACTTTCTTCCG 240
Db      181 GCTGTGCTCTCAGGGGAGCTCTCACTTGTATTAACCTGCAATCACTTTCTTCCG 240
Qy      241 TATATGCTGAGTGAAGTCACTCTTCCAGCTGGGAAAGAGTGTACAATTCAGTGTCA 300
Db      241 TATATGCTGAGTGAAGTCACTCTTCCAGCTGGGAAAGAGTGTACAATTCAGTGTCA 300
Qy      301 AATCTGACAGTGCAGAGAGAGTATGTCGGGTAGCCAGGTCTTGTGGTATAC 360
Db      301 AATCTGACAGTGCAGAGAGAGTATGTCGGGTAGCCAGGTCTTGTGGTATAC 360
Qy      361 TTCTCCAACTAGTGAAGTCTCTGAGACAGATTTCTTTGTTACGAAAAAGACCAAT 420
Db      361 TTCTCCAACTAGTGAAGTCTCTGAGACAGATTTCTTTGTTACGAAAAAGACCAAT 420
Qy      421 CAGATCAGCTTCTCTCATGCTATCACACGCTGCATGTTCAACATCTGGTGTGT 480
Db      421 CAGATCAGCTTCTCTCATGCTATCACACGCTGCATGTTCAACATCTGGTGTGT 480
Qy      481 TTGAACCTGATACCTTGTGTCAAAAGCTTTTGTGAGCCACCTGAAACAGCTTATAC 540
Db      481 TTGAACCTGATACCTTGTGTCAAAAGCTTTTGTGAGCCACCTGAAACAGCTTATAC 540
Qy      541 ATTCTCATGTAATCTGCTACAGGCTGCTGTGTTCCGCTCATGACCAAGTACCTTTG 600
Db      541 ATTCTCATGTAATCTGCTACAGGCTGCTGTGTTCCGCTCATGACCAAGTACCTTTG 600
Qy      601 TGAAGAAAGTACCTCAACAAGGCTCAGTGTGAGTGTGATCACTCAACATCAGCAGC 660
Db      601 TGAAGAAAGTACCTCAACAAGGCTCAGTGTGAGTGTGATCACTCAACATCAGCAGC 660
Qy      661 CTGAGTGCCTGTGTGAAGCCCTGTGGCTTCCCTTTGGCTGTCTCACTTCCAGTCTTC 720
Db      661 CTGAGTGCCTGTGTGAAGCCCTGTGGCTTCCCTTTGGCTGTCTCACTTCCAGTCTTC 720
Qy      721 TATATGATGACCTGCTCATCTCTTCTTAACTTATTCAGACATACCGAAAAAG 780
Db      721 TATATGATGACCTGCTCATCTCTTCTTAACTTATTCAGACATACCGAAAAAG 780
Qy      781 CCAAGTGAAGAAAGAGCTGCAGAGAAAGAGTGAAGTGTTCCTCCAAAGCCACTTA 840
Db      781 CCAAGTGAAGAAAGAGCTGCAGAGAAAGAGTGAAGTGTTCCTCCAAAGCCACTTA 840
Qy      841 ATTGTGGCTAATGGCATGACGAGCAAGAAAGGCTCAATTA 879
Db      841 ATTGTGGCTAATGGCATGACGAGCAAGAAAGGCTCAATTA 879

```

RESULT 3
US-10-120-637A-22
; Sequence 22, Application US/10120637A

Publication No. US20030134400A1
 GENERAL INFORMATION:
 APPLICANT: Abbott Laboratories
 APPLICANT: Mukerji, Pradip
 APPLICANT: Thurmond, Jennifer M.
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Das, Tapas
 APPLICANT: Leonard, Amanda E.
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
 FILE REFERENCE: 6804, US, P1
 CURRENT FILING DATE: 2002-04-11
 PRIOR FILING DATE: 2001-05-04
 PRIOR APPLICATION NUMBER: US 09/849,199
 NUMBER OF SEQ ID NOS: 73
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 22
 LENGTH: 879
 TYPE: DNA
 ORGANISM: Mus musculus
 US-10-120-637A-22

Query Match 100.0%; Score 879; DB 14; Length 879;
 Best Local Similarity 100.0%; Pred. No. 6,6e-282;
 Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGCAGCTGGAAGGCTTTGATATGAAGTCAATGCTTTCTTGACAACTGTTTGA 60
 DB 1 ATGAGCAGCTGGAAGGCTTTGATATGAAGTCAATGCTTTCTTGACAACTGTTTGA 60
 QY 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGAGCTTACCTCCACCTTCATC 120
 DB 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGAGCTTACCTCCACCTTCATC 120
 QY 121 CTCACCATGACGATCTGCTCTCGATATGCTGGGATCAAGATCAAGAAACAGGCT 180
 DB 121 CTCACCATGACGATCTGCTCTCGATATGCTGGGATCAAGATCAAGAAACAGGCT 180
 QY 121 CTCACCATGACGATCTGCTCTCGATATGCTGGGATCAAGATCAAGAAACAGGCT 180
 DB 121 CTCACCATGACGATCTGCTCTCGATATGCTGGGATCAAGATCAAGAAACAGGCT 180
 QY 181 GCTGTGCTCGAGGGGATCTGATGATGCTGATGATGCTGATGATGCTGATGATGCT 240
 DB 181 GCTGTGCTCGAGGGGATCTGATGATGCTGATGATGCTGATGATGCTGATGATGCT 240
 QY 241 TATATGCTGTGAGAGCTCATCTCTCCAGCTGGAGAGATTAACAATTGACGTGAC 300
 DB 241 TATATGCTGTGAGAGCTCATCTCTCCAGCTGGAGAGATTAACAATTGACGTGAC 300
 QY 301 AATCTGACAGTGCAGAGAGAGATGATGCTGGGTAGCCAAAGTCTTGTGTGTATC 360
 DB 301 AATCTGACAGTGCAGAGAGAGATGATGCTGGGTAGCCAAAGTCTTGTGTGTATC 360
 QY 361 TTCTCCAACTAGTGAAGTCTCTGGAACGATTTCTTGTGTCTACGAAAAAGCAAT 420
 DB 361 TTCTCCAACTAGTGAAGTCTCTGGAACGATTTCTTGTGTCTACGAAAAAGCAAT 420
 QY 421 CAGATACCTTCTTCTATGCTATGACAGCGCTCCATGTTCAACATGTGTGTGT 480
 DB 421 CAGATACCTTCTTCTATGCTATGACAGCGCTCCATGTTCAACATGTGTGTGT 480
 QY 481 TTGAAGTGAATCCTGTGTGTCAGAGCTCTTGTGACCCACCTGAAACGCTTTATCC 540
 DB 481 TTGAAGTGAATCCTGTGTGTCAGAGCTCTTGTGACCCACCTGAAACGCTTTATCC 540
 QY 541 ATTCTCATGTACTCTTACTACAGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
 DB 541 ATTCTCATGTACTCTTACTACAGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
 QY 601 TGAAGAAAGTACTTCAACAGGCTTCAAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
 DB 601 TGAAGAAAGTACTTCAACAGGCTTCAAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
 QY 661 CTGAGTGCCTGTGTGAAGCCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 720

DB 661 CTGAGTGCCTGTGTGAAGCCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 720
 QY 721 TATATGATGACGCTGTGTATCTCTGTTCTTAACTTATATCAACATACCGAAAAAG 780
 DB 721 TATATGATGACGCTGTGTATCTCTGTTCTTAACTTATATCAACATACCGAAAAAG 780
 QY 781 CCAGTGAAGAAAGAGCTGCAGAGAGAGATGATGTTTCCCAAGCCACTTA 840
 DB 781 CCAGTGAAGAAAGAGCTGCAGAGAGAGATGATGTTTCCCAAGCCACTTA 840
 QY 841 ATTGTGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 879
 DB 841 ATTGTGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 879

RESULT 4
 US-10-156-911-5
 Sequence 5, Application US/10156911
 Publication No. US20030163845A1

GENERAL INFORMATION:
 APPLICANT: Mukerji, Pradip
 APPLICANT: Leonard, Amanda Eun-Yeong
 APPLICANT: Huang, Yung-Sheng
 APPLICANT: Pereira, Suzette L.
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 FILE REFERENCE: 6407, US, P4
 CURRENT APPLICATION NUMBER: US/10/156,911
 CURRENT FILING DATE: 2002-10-01
 PRIOR APPLICATION NUMBER: US 09/903,456
 PRIOR FILING DATE: 2001-07-11
 PRIOR APPLICATION NUMBER: US 09/624,670
 PRIOR FILING DATE: 2000-07-24
 PRIOR APPLICATION NUMBER: US 09/379,095
 PRIOR FILING DATE: 1999-08-23
 PRIOR APPLICATION NUMBER: US 09/145,828
 PRIOR FILING DATE: 1998-09-02
 NUMBER OF SEQ ID NOS: 122
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 5
 LENGTH: 879
 TYPE: DNA
 ORGANISM: Mus musculus
 US-10-156-911-5

Query Match 100.0%; Score 879; DB 14; Length 879;
 Best Local Similarity 100.0%; Pred. No. 6,6e-282;
 Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGCAGCTGGAAGGCTTTGATATGAAGTCAATGCTTTCTTGACAACTGTTTGA 60
 DB 1 ATGAGCAGCTGGAAGGCTTTGATATGAAGTCAATGCTTTCTTGACAACTGTTTGA 60
 QY 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGAGCTTACCTCCACCTTCATC 120
 DB 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGAGCTTACCTCCACCTTCATC 120
 QY 121 CTCACCATGACGATCTGCTCTCGATATGCTGGGATCAAGATCAAGAAACAGGCT 180
 DB 121 CTCACCATGACGATCTGCTCTCGATATGCTGGGATCAAGATCAAGAAACAGGCT 180
 QY 181 GCTGTGCTCGAGGGGATCTGATGATGCTGATGATGCTGATGATGCTGATGATGCT 240
 DB 181 GCTGTGCTCGAGGGGATCTGATGATGCTGATGATGCTGATGATGCTGATGATGCT 240
 QY 241 TATATGCTGTGAGAGCTCATCTCTCCAGCTGGAGAGATTAACAATTGACGTGAC 300
 DB 241 TATATGCTGTGAGAGCTCATCTCTCCAGCTGGAGAGATTAACAATTGACGTGAC 300
 QY 301 AATCTGACAGTGCAGAGAGAGATGATGCTGGGTAGCCAAAGTCTTGTGTGTATC 360
 DB 301 AATCTGACAGTGCAGAGAGAGATGATGCTGGGTAGCCAAAGTCTTGTGTGTATC 360

QY 361 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAGACCAAT 420
 Db 361 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAGACCAAT 420
 QY 421 CAGATCACCTTCCTTATGTCATACCAAGGCTCCATGTTACATGTGGTGTGT 480
 Db 421 CAGATCACCTTCCTTATGTCATACCAAGGCTCCATGTTACATGTGGTGTGT 480
 QY 481 TTGAATCGATTAACCTTGTGGTCAAACTCTTTTGAAGCCACCTGAAGCTTATCCAC 540
 Db 481 TTGAATCGATTAACCTTGTGGTCAAACTCTTTTGAAGCCACCTGAAGCTTATCCAC 540
 QY 541 ATTCTCATGTACTCTACTACAGGCTGTGTGTTCCCTCCATGACAGATACCTTTG 600
 Db 541 ATTCTCATGTACTCTACTACAGGCTGTGTGTTCCCTCCATGACAGATACCTTTG 600
 QY 601 TGGAGAGAGTACCTCACAACAGGCTCAGCTGTGACATTCATCAATCAACGACACG 660
 Db 601 TGGAGAGAGTACCTCACAACAGGCTCAGCTGTGACATTCATCAATCAACGACACG 660
 QY 661 CTGAGTCCCTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTCC 720
 Db 661 CTGAGTCCCTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTCC 720
 QY 721 TATATGATGACGCTGTGTCTATCTTCTTAACTTCTATATTCAGACATACCGGAAAAAG 780
 Db 721 TATATGATGACGCTGTGTCTATCTTCTTAACTTCTATATTCAGACATACCGGAAAAAG 780
 QY 781 CCGATGAGAGAAAGCTGCAAGAGAAAGAGAAATGTTTCCCAAGCCCACTTA 840
 Db 781 CCGATGAGAGAAAGCTGCAAGAGAAAGAGAAATGTTTCCCAAGCCCACTTA 840
 QY 841 ATTGTGCTATATGCGATGACGACAAAGAGCTCATATA 879
 Db 841 ATTGTGCTATATGCGATGACGACAAAGAGCTCATATA 879

RESULT 5
 US-10-198-846-13406
 ; Sequence 13406, Application US/10198846
 ; Publication No. US2003009974A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Lillie, James
 ; APPLICANT: Xu, Yongzao
 ; APPLICANT: Wang, Youzhen
 ; APPLICANT: Steinmann, Kathleen
 ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
 ; TITLE OF INVENTION: FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
 ; FILE REFERENCE: MRI-049
 ; CURRENT APPLICATION NUMBER: US/10/198, 846
 ; PRIOR FILING DATE: 2002-07-18
 ; PRIOR APPLICATION NUMBER: 60/306, 220
 ; NUMBER OF SEQ ID NOS: 14084
 ; SOFTWARE: Fast-Seq for Windows Version 4.0
 ; SEQ ID NO 13406
 ; LENGTH: 2426
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: 1, 2425, 2426
 ; OTHER INFORMATION: n = A,T,C or G
 US-10-198-846-13406

Query Match 74.2%; Score 652.2; DB 14; Length 2426;
 Best Local Similarity 84.3%; Prod. No. 5,7e-206;
 Matches 751; Conservative 0; Mismatches 128; Indels 12; Gaps 1;

Db 85 ATGGAACATCTAAGGCCCTTGTATGATGATAATCAATGCTTTTGGACAAATATGTTGA 144
 QY 61 CCACGAGATTCCTGAGTTCGCGGGGTGTCTGCTGAGACTTCTACCTTCCACCTTCATC 120
 Db 145 CCGCGAGATTCCTGAGTTCGAGGGGTGTCTGCTGAGACTTCTACCTTCCACCTTCTT 204
 QY 121 CTCACATCACCTTACCTCTCTCGATATGAGTGGATTAACAATCATGAAAGACGCT 180
 Db 205 CTTACTGTATATCTCTCTCAATATGAGTGGATTAACAATCATGAAAGACGCT 264
 QY 181 GCTTGTCTCTGAGGGGATCTCACTTGTATTAACCTCGAAATCACTTCTTCTGCG 240
 Db 265 GCTTGTCTCTGAGGGGATCTCACTTGTATTAACCTCGAAATCACTTCTTCTGCG 324
 QY 241 TATATGATGAGACTATCTCTCCAGCTGAGAGAGATTAACAATTCAGATGTACG 300
 Db 325 TACATGCTGGACAGACTATCTCTCCAGCTTGGAGAGAGATTAACAATTCAGATGTAC 384
 QY 301 AATCTGACAGTGCAGAGAGAGATGTCTCGGGTATGCCAAGTCTTGTGTACTAC 360
 Db 385 GATCTTACAGAGGAGAGAGAGATGTCTCGGGTATGCCAAGTCTTGTGTACTAT 444
 QY 361 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAGACCAAT 420
 Db 445 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAGACCAAT 504
 QY 421 CAGATCACCTTCCTTATGTCATACCAAGGCTCCATGTTACATGTGGTGTGT 480
 Db 505 CAGATCACCTTCCTTATGTCATACCAAGGCTCCATGTTACATGTGGTGTGT 564
 QY 481 TTGAATCGATTAACCTTGTGGTCAAACTCTTTTGAAGCCACCTGAAGCTTATCCAC 540
 Db 565 TTGAATCGATTAACCTTGTGGTCAAACTCTTTTGAAGCCACCTGAAGCTTATCCAC 624
 QY 541 ATTCTCATGTACTCTACTACAGGCTGTGTGTTCCCTCCATGACAGATACCTTTG 600
 Db 625 ATTCTCATGTACTCTACTACAGGCTGTGTGTTCCCTCCATGACAGATACCTTTG 684
 QY 601 TGGAGAGAGTACCTCACAACAGGCTCAGCTGTGACATTCATCAATCAACGACACG 660
 Db 685 TGGAGAGAGTACCTCACAACAGGCTCAGCTGTGACATTCATCAATCAACGACACG 744
 QY 661 CTGAGTCCCTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTCC 720
 Db 745 ATGAGGCGCTGTGTAACCGTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTCC 804
 QY 721 TATATGATGACGCTGTGTCTATCTTCTTAACTTCTATATTCAGACATACCGGAAAAAG 780
 Db 805 TATATGATGACGCTGTGTCTATCTTCTTAACTTCTATATTCAGACATACCGGAAAAAG 864
 QY 781 CCGATGAGAGAAAGCTGCAAGAGAAATGTTTCCCAAGCCCACTTA 840
 Db 865 CCGATGAGAGAAAGCTGCAAGAGAAATGTTTCCCAAGCCCACTTA 924
 QY 829 AAAGCCACTTATATGCTTATGCAATGACGACAAAGAGCTCATATA 879
 Db 925 AAAGCCACTTATGCTTATGCAATGACGACAAAGAGCTCATATA 975

RESULT 6
 US-10-058-270A-91
 ; Sequence 91, Application US/10058270A
 ; Publication No. US20040029114A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Mack, David H.
 ; APPLICANT: Ahar, Daniel
 ; APPLICANT: Gish, Kurt C.
 ; APPLICANT: Eos Biotechnology, Inc.
 ; TITLE OF INVENTION: Methods of Diagnosis of Breast Cancer, Compositions and
 ; TITLE OF INVENTION: Methods of Screening for Modulators of Breast Cancer
 ; FILE REFERENCE: 018501-005210US
 ; CURRENT APPLICATION NUMBER: US/10/058, 270A
 ; CURRENT FILING DATE: 2002-01-24

PRIOR APPLICATION NUMBER: US 60/263,965
 PRIOR FILING DATE: 2001-01-24
 PRIOR APPLICATION NUMBER: US 60/265,928
 PRIOR FILING DATE: 2001-02-02
 PRIOR APPLICATION NUMBER: US 09/829,472
 PRIOR FILING DATE: 2001-04-09
 PRIOR APPLICATION NUMBER: US 60/282,698
 PRIOR FILING DATE: 2001-04-09
 PRIOR APPLICATION NUMBER: US 60/288,590
 PRIOR FILING DATE: 2001-05-04
 PRIOR APPLICATION NUMBER: US 60/294,443
 PRIOR FILING DATE: 2001-05-29
 NUMBER OF SEQ ID NOS: 141
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 91
 LENGTH: 2340
 TYPE: DNA
 ORGANISM: Homo sapiens
 US-10-058-270A-91

Query Match 74.0%; Score 650.6; DB 12; Length 2340;

Best Local Similarity 84.2%; Pred. No. 1,9e-205;
 Matches 750; Conservative 0; Mismatches 129; Indels 12; Gaps 1;

1 ATGAGCAGCTGAAGGCTTGATGATGAATGATGCTTTCTTGACACATGTTTGA 60
 85 ATGGAACATCTAAGGCTTGATGATGAATGATGCTTTTGACACATGTTTGA 144
 61 CCAGGATTTCTGAGTTCGGGGTGTCTCTGAGCTTACCTTCCACCTTCAAC 120
 145 CCGGAGATTTCTGAGTTCGGGGTGTCTCTGAGCTTACCTTCCACCTTCAAC 204
 121 CTCACATCAGCTGCTCTCTGATATGAGTGGGTGACAGTACAGTAAAGAGGCT 180
 205 CTTACGTCAGATGATGCTCTCTGATATGAGTGGGTGACAGTACAGTAAAGAGGCT 264
 181 GCTCTGCTCTCAGGGGATCTTCACTTGTATTAACCTGCAATCACTTCTTTGCG 240
 265 GCTCTCTCTCAGGGGATCTTCACTTGTATTAACCTGCAATCACTTCTTTGCG 324
 241 TATATGCTGGTGGAGCTCATCTCTCAGCTGGGAGGAGGTATGAGTGGAGTGG 300
 325 TACATGCTGGAGGCTCATCTCTCAGCTGGGAGGAGGTATGAGTGGAGTGG 384
 301 AATCTCAGCAGTGGAGGAGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGT 360
 385 GATCTTACGAGCGAGGGGAGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGT 444
 361 TTCTCCAACTAGTGGAGTGGTGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGT 420
 445 TTCTCCAACTAGTGGAGTGGTGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGT 504
 421 CAGATCACT 480
 505 CAGATCACT 564
 481 TTGAAGTGGATGCTTGTGTGCAAGTCTTCTTGACCACTTGAACAGCTTATCCAC 540
 565 TTGAAGTGGATGCTTGTGTGCAAGTCTTCTTGACCACTTGAACAGCTTATCCAC 624
 541 ATTCTCATGCT 600
 625 ATTCTCATGCT 684
 601 TGAAGAGTACCTTCAACAGGCTCACTGCTGAGTGGAGTGGTGGTGGTGGTGGTGG 660
 685 TGAAGAGTACCTTCAACAGGCTCACTGCTGAGTGGAGTGGTGGTGGTGGTGGTGG 744
 661 CTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
 745 ATGAGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 804
 721 TATATGATGACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 780

DB 805 TATATGATGACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 864
 QY 781 CCAATGAGAGAGAGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 828
 DB 865 CCAATGAGAGAGAGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 924
 QY 829 AAGGCCACTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 879
 DB 925 AAGGCCACTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 975

RESULT 7

US-10-342-887-1707
 Sequence 1707; Application US/10342887
 Publication No. US20040058340A1
 GENERAL INFORMATION:
 APPLICANT: Dai, Hongyue
 APPLICANT: He, Yudong
 APPLICANT: Linsley, Peter S.
 APPLICANT: Mao, Mao
 APPLICANT: Roberts, Christopher J.
 APPLICANT: Van de Vijver, Laura Johanna
 APPLICANT: Van de Vijver, Marc J.
 APPLICANT: Bernard, Rene
 TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients
 FILE REFERENCE: 9301-188-999
 CURRENT APPLICATION NUMBER: US/10/342,887
 PRIOR FILING DATE: 2003-01-15
 PRIOR APPLICATION NUMBER: 60/298,918
 PRIOR FILING DATE: 2001-06-18
 PRIOR APPLICATION NUMBER: 60/380,710
 PRIOR FILING DATE: 2002-05-14
 PRIOR APPLICATION NUMBER: 10/172,118
 PRIOR FILING DATE: 2002-06-14
 NUMBER OF SEQ ID NOS: 2699
 SEQ ID NO 1707
 LENGTH: 2340
 TYPE: DNA
 ORGANISM: Homo sapiens
 US-10-342-887-1707

Query Match 74.0%; Score 650.6; DB 12; Length 2340;
 Best Local Similarity 84.2%; Pred. No. 1,9e-205;
 Matches 750; Conservative 0; Mismatches 129; Indels 12; Gaps 1;

1 ATGAGCAGCTGAAGGCTTGATGATGAATGATGCTTTCTTGACACATGTTTGA 60
 85 ATGGAACATCTAAGGCTTGATGATGAATGATGCTTTTGACACATGTTTGA 144
 61 CCAGGATTTCTGAGTTCGGGGTGTCTCTGAGCTTACCTTCCACCTTCAAC 120
 145 CCGGAGATTTCTGAGTTCGGGGTGTCTCTGAGCTTACCTTCCACCTTCAAC 204
 121 CTCACATCAGCTGCTCTCTGATATGAGTGGGTGACAGTACAGTAAAGAGGCT 180
 205 CTTACGTCAGATGATGCTCTCTGATATGAGTGGGTGACAGTACAGTAAAGAGGCT 264
 181 GCTCTGCTCTCAGGGGATCTTCACTTGTATTAACCTGCAATCACTTCTTTGCG 240
 265 GCTCTCTCTCAGGGGATCTTCACTTGTATTAACCTGCAATCACTTCTTTGCG 324
 241 TATATGCTGGTGGAGTGGTGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGTGG 300
 325 TACATGCTGGAGGCTCATCTCTCAGCTGGGAGGAGGTATGAGTGGAGTGG 384
 301 AATCTCAGCAGTGGAGGAGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGTGGT 360
 385 GATCTTACGAGCGAGGGGAGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGTGGT 444
 361 TTCTCCAACTAGTGGAGTGGTGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGTGGT 420
 445 TTCTCCAACTAGTGGAGTGGTGGAGTGGATGCTCGGGTGGAGGAGTGGTGGTGGTGGT 504

Query Match	39.2 %	Score 345;	DB 9;	Length 900;
Best Local Similarity	65.8 %	Pred. No. 8.7e-104;		
Matches 501; Conservative	0;	Mismatches 260;	Indels	0; Gaps
0y	19	TTTGATTAATGCAATGATCATGCTTTCTTGGACCAATGTTGGACACAGATTCAGTT	78	
Db	10	TTGATGCGCTACATCAATCTAATTTCAAGGCTTCTGGGCCCCGAGATCAAGATC	69	
0y	79	CGGGGNGGTTCTGGTGGATCTTACCTCCACCTTCATCTCAGCATCAGTAACTG	138	
Db	70	AAAGATGTTCTCTCTGAGCAATTCATCCCTAAGTTTGTCTTCTGTATTATTCCTA	129	

```

RESULT 9
US-10-156-911-6
; Sequence 6, Application US/10156911
; Publication No. US20030163845A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Young
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Petrela, Suzette U.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P4
; CURRENT APPLICATION NUMBER: US/10/156,911
; CURRENT FILING DATE: 2002-10-01
; PRIOR APPLICATION NUMBER: US 09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 900
; TYPE: DNA
;

```

ORGANISM: Mus musculus
US-10-156-911-6

Query Match 39.2%; Score 345; DB 14; Length 900;
Best Local Similarity 65.8%; Pred. No. 8,7e-104;
Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

```
QY 19 TTGATATGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 78
DB 10 TTGATGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 69
QY 79 CGGGGGGTTCCCTGAGCTTCTTACCTCCACCTTCACTCCACCACTGACCTG 138
DB 70 AAAGATGTTCTCTCTGAGCAATTAATACCTTCACTGTTGTTGTTGTTTACTTA 129
QY 139 CTCTGATATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 198
DB 130 CTCTGATATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 189
QY 199 ATCTGACCTTGTATTAAGCTTGCATCACTCTTCTGCGTATATGCTGAGTCTC 258
DB 190 ATCTGACCTTGTATTAAGCTTGCATCACTCTTCTGCGTATATGCTGAGTCTC 249
QY 259 ATCTGACCTTGTATTAAGCTTGCATCACTCTTCTGCGTATATGCTGAGTCTC 318
DB 250 GTGACAGTGTGAGGAGGAGCAATTAATACCTTCTGCGTATATGCTGAGTCTC 309
QY 319 GAAAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 378
DB 310 GAAAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 369
QY 379 TTCTGACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 438
DB 370 TTCTGACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 429
QY 439 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 498
DB 430 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 489
QY 499 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 558
DB 490 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 549
QY 559 TAGGAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 618
DB 550 TAGGAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 609
QY 619 CAGGCTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 678
DB 610 CAGGCTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 669
QY 679 CCTGTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 738
DB 670 CCTGTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 729
QY 739 ATCTGCTTAACTTCTATATTCAGACATACCGAAAAA 779
DB 730 GCTCTTCAAACTTCTATATTCAGACATACCGAAAAA 770
```

RESULT 10
US-09-903-456-3

Sequence 3, Application US/09903456
Patent No. US20020138874A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407, US, P3

CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

US-09-903-456-3

Query Match 37.4%; Score 329; DB 9; Length 914;
Best Local Similarity 64.5%; Pred. No. 1.9e-98;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

```
QY 19 TTGATATGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 78
DB 10 TTGATGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 69
QY 79 CGGGGGGTTCCCTGAGCTTCTTACCTCCACCTTCACTCCACCACTGACCTG 138
DB 70 AAAGATGTTCTCTCTGAGCAATTAATACCTTCACTGTTGTTGTTTACTTA 129
QY 139 CTCTGATATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 198
DB 130 CTCTGATATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 189
QY 199 ATCTGACCTTGTATTAAGCTTGCATCACTCTTCTGCGTATATGCTGAGTCTC 258
DB 190 ATCTGACCTTGTATTAAGCTTGCATCACTCTTCTGCGTATATGCTGAGTCTC 249
QY 259 ATCTGACCTTGTATTAAGCTTGCATCACTCTTCTGCGTATATGCTGAGTCTC 318
DB 250 GTGACAGTGTGAGGAGGAGCAATTAATACCTTCTGCGTATATGCTGAGTCTC 309
QY 319 GAAAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 378
DB 310 GAAAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 369
QY 379 TTCTGACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 438
DB 370 TTCTGACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 429
QY 439 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 498
DB 430 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 489
QY 499 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 558
DB 490 GTCTATACCAAGTATTTCTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 549
QY 559 TAGGAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 618
DB 550 TAGGAGTATGCTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 609
QY 619 CAGGCTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 678
DB 610 CAGGCTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 669
QY 679 CCTGTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 738
DB 670 CCTGTGAGTGTGAGTCAATGCTTTCTTGAGACATGTTGGACCAAGATTCTGAGTT 729
QY 739 ATCTGCTTAACTTCTATATTCAGACATACCGAAAAA 779
DB 730 GCTCTTCAAACTTCTATATTCAGACATACCGAAAAA 770
```

RESULT 11

US-09-769-863-21
 ; Sequence 21, Application US/09769863
 ; Publication No. US2003015744A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Das, Tapas
 ; APPLICANT: Thurmond, Jennifer
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6763 US 01
 ; CURRENT APPLICATION NUMBER: US/09/769,863
 ; CURRENT FILING DATE: 2001-01-25
 ; NUMBER OF SEQ ID NOS: 32
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 21
 ; LENGTH: 914
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; US-09-769-863-21

Query Match 37.4%; Score 329; DB 10; Length 914;

Best Local Similarity 64.5%; Pred. No. 1,9e-98;
 Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

QY 19 TTGATATGAAGTCATGCTTTCTTGACAAATGTTGGACGAGATTCGAGTT 78
 DB 10 TTGATGATCACTTAGTACTATTTCAGGCAATGAGCCCTCGAGATCTAGTA 69
 QY 79 CCGGGGTGCTCTGCTGACCTTACCTCCCACTTCACTCAGCAGATCAGTACTG 138
 DB 70 AAAGATGATTTCTTCTGACCAATTATACCAATTATCTGCTGCTATATTTA 129
 QY 139 CTCTGATATGCTGGGTACAGTACAGTAAAGACAGCCTGCTCTCTCAGGGGC 198
 DB 130 CTATATGATGCTGGGACCAAAATACATGAGATTAACAGCATTCCTGCGGGG 189
 QY 199 ATCTCACTTGTATTAACCTGCAATCACTCTTCTTGCTATGCTGGTGAAGCT 258
 DB 190 ATTTAGTGTATTAACCTGAGCTCACTGCTCTGCTATATGCTTCTGAGTTA 249
 QY 259 ATCCCTCCAGCGGGAAGAGGTACACCTGAGTCAAGTCAATTCGACAGTGA 318
 DB 250 GTAACGAGATATGGAAGGCAAAATACATCTTCTCTGAGGCAACGACCGGGA 309
 QY 319 GAAGTATGTCGGGTAGCAAGGCTTGTGTGATCTACTTCTCAACTAGTGA 378
 DB 310 GAATCAGATATGAAGATATCCGTGCTCTGCTGCTGCTCTCAACTATGAA 369
 QY 379 TTCTGAGACATTTCTTCTTGTCTAGGAAAGAACATCAGATCACTTCTCAT 438
 DB 370 TTATGAGACATTTCTTCTTCACTCTGCGCAAGAACACACAGATACGGTCTC 429
 QY 439 GTCTATACACAGCGCTCATGTTCAACATCTGTGTGTGTTTGAATGATACCTGT 498
 DB 430 GTTATACACAGCGCTCATGTTCAACATCTGTGTGTGTTTGAATGATACCTGT 489
 QY 499 GGTCAAGCTCTTTTGAACCCACCTGAACAGCTTATCAATTTCTATCTTCTAC 558
 DB 490 GGGCACTCTTATTTGGTGCCACATTAATACCTTCAACAGCTCTCATATCTTAC 549
 QY 559 TACGGCTGTGTGTTCCGCTCAGTACAGTCAAGTCACTTGTGGAAGATACCTG 618
 DB 550 TATGTTGTGTGAGTCTCTTCTTCACTGCTGCTCATACCTGTGTGGAAGATAC 609
 QY 619 CAGGCTCAGTGTGTGAGTGTCTACATCAACAGCAGCTGAGTGGTGTGAAG 678
 DB 610 CAGGGGACCTGTGTTAGTTGTGTGATCAATCAACAGCAGCTGAGTGTGATGG 669
 QY 679 CCTGTGAGCTTCCCTTGTGCTGCTCATCTTCACTGCTCTATATGATGACCTGT 728
 DB 670 CCTGTGACATTCCTTGTGTTGTGTGATTTCCAGATGATGATCATTTTCCCTG 729

QY 729 ATCTGTTCTTAACCTTCTATATTCAGACATACCGGAAAAA 779
 DB 730 GCTCTCTTCAAACTTCTTACTTCAAGCTTAAACAGAA 770

RESULT 12

US-10-156-911-3
 ; Sequence 3, Application US/10156911
 ; Publication No. US20030163845A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P4
 ; CURRENT APPLICATION NUMBER: US/10/156,911
 ; CURRENT FILING DATE: 2002-10-01
 ; PRIOR APPLICATION NUMBER: US 09/903,456
 ; PRIOR FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 122
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 914
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; US-10-156-911-3

Query Match 37.4%; Score 329; DB 14; Length 914;

Best Local Similarity 64.5%; Pred. No. 1,9e-98;
 Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

QY 19 TTGATATGAAGTCATGCTTTCTTGACAAATGTTGGACGAGATTCGAGTT 78
 DB 10 TTGATGATCACTTAGTACTATTTCAGGCAATGAGCCCTCGAGATCTAGTA 69
 QY 79 CCGGGGTGCTCTGCTGACCTTACCTCCCACTTCACTCAGCAGATCAGTACTG 138
 DB 70 AAAGATGATTTCTTCTGACCAATTATACCAATTATCTGCTGCTATATTTA 129
 QY 139 CTCTGATATGCTGGGTACAGTACAGTAAAGACAGCCTGCTCTCTCAGGGGC 198
 DB 130 CTATATGATGCTGGGACCAAAATACATGAGATTAACAGCATTCCTTCCGGGG 189
 QY 199 ATCTCACTTGTATTAACCTGCAATCACTCTTCTTGCTATGCTGGTGAAGCT 258
 DB 190 ATTTAGTGTATTAACCTGAGCTCACTGCTCTGCTATATGCTTCTGAGTTA 249
 QY 259 ATCCCTCCAGCGGGAAGAGGTACACCTGAGTCAAGTCAATTCGACAGTGA 318
 DB 250 GTAACGAGATATGGAAGGCAAAATACATCTTCTCTGAGGCAACGACCGGGA 309
 QY 319 GAAGTATGTCGGGTAGCAAGGCTTGTGTGATCTACTTCTCAACTAGTGA 378
 DB 310 GAATCAGATATGAAGATATCCGTGCTCTGCTGCTGCTCTCAACTATGAA 369
 QY 379 TTCTGAGACATTTCTTCTTGTCTACGAAAAAGCAATGATACCTTCTCAT 438
 DB 370 TTATGAGACATTTCTTCTTCTTATCTCTGCGCAAGAACACAGATACGGTCT 429
 QY 439 GTCTATACCAAGCGCTCATGTTCAACATCTGTGTGTGTTTGAATGATACCTGT 498
 DB 430 GTCTACACCATGCTGCTGATGCTGATGATCTGAGTGTGTGATGAACTGGGCT 489
 QY 499 GGTCAAGCTCTTCTTGAACCCACCTGAAAGCTTATCAATTCATGATCTCTAC 558

```

Db      490 GGGCACTTATTTTGGTGCACACTTAATAGCTTATCCAGCTCTCATAGTACTCTTAC 549
Qy      559 TACGACCTGTCTGTGTGTCCTCCATGCACAGTACCTTGTGTGAAGAAGTACTCA 618
Db      550 TATGTTTGTGTGTAGTCCCTTCATGCGTCCATACCTCTGGTGAAGAAGTACTCA 609
Qy      619 CAGGCTCAGCTGTGTGAGTTCGTAATCATCATCAGCAGCAGCTGTAGTCCCTGTGAAG 678
Db      610 CAGGGGAGCTGTCTCAGTTGTGTGCTGACATATCATCAGCAGCTGCGGGGTCAATCTGG 669
Qy      679 CCCGTGAGCTTCCCTTGTGCTGTCTCATCTTCAGCTCTCTATATGATGAGCTGTGTC 738
Db      670 CCGTGACATTCCTCTCTGTGTGTGTGTATTTCCAGATTTGATGATTTATTTCCCTGATT 729
Qy      739 ATCCTGTTCTTAACTTCTATATTCAGACATACCGGAAAA 779
Db      730 GCTCTCTTCAAAACTTCTACATTCAGACCTTACAACAGAGA 770

```

```

RESULT 13
US-10-054-534B-21
; Sequence 21, Application US/10054534B
; Publication No. US20030167525A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Dae, Tapas
; APPLICANT: Thurmond, Jennifer M.
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763 US. P1
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: US 09/769,863
; PRIOR FILING DATE: 2001-01-25
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-054-534B-21

```

```

Query Match      37.4%; Score 329; DB 14; Length 914;
Best Local Similarity 64.5%; Pred. No. 1.9e-98;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

Qy      19 TTGATATGAAGTCAATGCTTCTTGACAAATGTTTGGACACAGATTTCTCGAGTT 78
Db      10 TTTGATGATCACTTAACTTATTCAGGCACTGTAGCCCTGAGATTAAGTA 69
Qy      79 GCGGGGTGTTCTGCTGGAAGTCTTACCTTCCACCTTACTCTCAGCAGTACGTC 138
Db      70 AAAGGATGTTTCTCTGACAAATTAATACCCCAATTTATCTGCTCTGCAATATTTA 129
Qy      139 CTCTCGATATGGCTGGTAAACAGTACATGAAGAAAGAGCGCTGCTGTCTCAGGGGC 198
Db      130 CTAAATTTGATGCTGGGACCAAAATACATGAGAAATTAACAGCATTTCTTTCGCGGGG 189
Qy      199 ATCTCAGCTTGTATTAACCTGCAATCAGCTTCTTCTGCTATATGATGTGTGAGCTC 258
Db      190 ATTTAGTGTGTATTAACCTTGAATCAGCTGCTGTCTGTATATGTTCTGTGAGTTA 249
Qy      259 ATCTCTCCAGCTGGGAGAGAGGTAACTGACAGTGTGAGATTCGACAGTGAAGA 318
Db      250 GTAACAGAGATATGGAGAGGCAATATACACTTTCTTGTCAAGGACACACGACGAGGA 309
Qy      319 GAAGGTATGTCGGGTAGCCAAAGTCTTGTGTGTGTATTAATTTCTCAAACTAGTGAG 378
Db      310 GAATAGATATGAAGTATATCGGTCTCTGTGTGTGTATCTTCTCAAACTATAGAA 369

```

```

Qy      379 TTCTGGACACGATTTTCTTGTGTACGAAAAAAGACAAATACAGTACCTTCTTAT 438
Db      370 TTTATGAGACATTTCTTCTTCACTCTGCGAGAAACACACGATACAGGTCTGTGAC 429
Qy      439 GTCTATACCAACCGCTCATATGTTCAACATCTGTGGTGTGTGTTTGAATGATATCTTGT 498
Db      430 GTCTACACCATCTCTCATATGCTGAACATCTGTGGTGTGTATGATGAATCGGGTCCCTGTC 489
Qy      499 GTCTAAAGCTTCTTGTGACCCACCTGGAACACTTTATCCATCTCATATGATACCTTAC 558
Db      490 GGGCAGCTTATTTGTGTGACACATTAATATCTTATCCAGCTCTCATATGATCTTAC 549
Qy      559 TACGACCTGTCTGTGTGTCCTCCATGCACAGTACCTTGTGTGAAGAAGTACTCA 618
Db      550 TATGTTTGTGTGTAGTCCCTTCATGCGTCCATACCTCTGTGTGAAGAAGTACTCA 609
Qy      619 CAGGCTCAGCTGTGTGAGTTCGTAATCATCATCAGCAGCAGCTGTAGTCCCTGTGAAG 678
Db      610 CAGGGGAGCTGTCTCAGTTGTGTGCTGACATATCATCAGACAGCTGCGGGGTCAATCTGG 669
Qy      679 CCCGTGAGCTTCCCTTGTGCTGTCTCATCTTCAGCTCTCTATATGATGAGCTGTGTC 738
Db      670 CCGTGACATTCCTCTCTGTGTGTGTGTATTTCCAGATTTGATGATTTATTTCCCTGATT 729
Qy      739 ATCCTGTTCTTAACTTCTATATTCAGACATACCGGAAAA 779
Db      730 GCTCTCTTCAAAACTTCTACATTCAGACCTTACAACAGAGA 770

```

```

RESULT 14
US-10-408-736-3
; Sequence 3, Application US/10408736
; Publication No. US20030177508A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Dae, Tapas
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Parker-Barnes, Jennifer M.
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Thurmond, Jennifer M.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US. P1
; CURRENT FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: US/09/379,095A
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-408-736-3

```

```

Query Match      37.4%; Score 329; DB 14; Length 914;
Best Local Similarity 64.5%; Pred. No. 1.9e-98;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

Qy      19 TTGATATGAAGTCAATGCTTCTTGACAAATGTTTGGACACAGATTTCTCGAGTT 78
Db      10 TTTATGATCACTTAACTTATTCAGGCACTGTAGCCCTGAGATTAAGTA 69
Qy      79 GCGGGGTGTTCTGCTGGAAGTCTTACCTTCCACCTTACTCTCAGCAGTACGTC 138
Db      70 AAAGGATGTTTCTCTGACAAATTAATACCCCAATTTATCTGCTCTGCAATATTTA 129
Qy      139 CTCTCGATATGGCTGGTAAACAGTACATGAAGAAAGAGCGCTGCTGTCTCAGGGGC 198
Db      130 CTAAATTTGATGCTGGGACCAAAATACATGAGAAATTAACAGCATTTCTTTCGCGGGG 189

```

QY	199	ATCCTCACCTTGATATACCTCGGAACACACAGCTCTCTTCGCGGTAATATGCTGGAGCTC	258
Db	190	ATTTTAGTGGTGTATTAACCTTGGACCTCAACCTGCTGTCTCTGTATATGTTTGAGGTTA	249
QY	259	ATCCTCTCCAGCTGGGAGAGAGTTTACAACTTGACAGTGTCAAAATCTGACAGTGCAGA	318
Db	250	GTAACAGAGATATGGGAGGCAAAATACAACTTCTGTGTGAGGGGACACGACGGCAGGA	309
QY	319	GAAGGTGATGTCCGGGTAGCCAAAGTCTTGTGTGTACTACTTCTCCAACTGTGGAG	378
Db	310	GAATCAGATGTGAAGATTATCCGTGTCCCTGTGTGTACTCTTCTCCAACTCATGAA	369
QY	379	TTCCTGGACAGATTTTCTTGTGTTCTAGCAAAAAAGCAATTCAGATACCTTCCAT	438
Db	370	TTTATGGACATTTCTTCTTCTTCACTCTGGCCAGAACAAACACAGATACCGTCTTCAAC	429
QY	439	GTCATACCAACCGCTGCATGTTTCAACATCTGTGTGTGTGTTGAACTGGATCCTGT	489
Db	430	GTCACCAACCATCTCTGTATGTGTAAACATCTGTGTGTGTGTGATGAACTGGGTCCCTGC	489
QY	499	GGTCAAAAGCTTCTTTGGACCCACACCTGAAACGCTTATTCACATTTCTATCTCTAC	558
Db	490	GGCACACTTATTTGGTGTGCACACTTATTACTTCACTCAACGTCCTCATTACTTAC	549
QY	559	TACGGCCTGTCTGTTCCTCCGTCCATGACACAGTACCTTGTGTGGAAGAAATTAACACA	618
Db	550	TATGTTTGTGTGACGTCCCTTCATGAGGTCAATACCTGTGTGGAAGAAATTAATACCT	609
QY	619	CAGGCTCAGTGTGTGAGTGTCTGACTCAGCATCAGCACAGCGTAGTGCCTGTGAAG	678
Db	610	CAGGGAGAGCTGTCTAGTTTG	669
QY	679	CCCTGTGAGCTTCCCTTTGGCTGTCTCATCTTCCAGCTTCTCTATATGACAGCTGTCTC	728
Db	670	CCGTGCACATTCCTCTGT	729
QY	739	ATCCTGTCTTAACTTCTATATGACATTCGGGAAAA	779
Db	730	GCTCTCTTCAAACTTCTATCACTTCAAGCTTCAAAACAGAA	770

```

RESULT 15
US-10-431-952-21
Sequence 21, Application US/10431952
Publication No. US20030190733A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Huang, Yung-Sheng
APPLICANT: Das, Tapas
APPLICANT: Thurmond, Jennifer
APPLICANT: Peretia, Suzette L.
TITLE OF INVENTION: DECATALYSE GENES AND USBS THEREOF
FILE REFERENCE: 6763.US.O1
CURRENT APPLICATION NUMBER: US/10/431,952
CURRENT FILING DATE: 2003-05-08
PRIORITY APPLICATION NUMBER: US/09/765,863
PRIORITY FILING DATE: 2001-01-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 21
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-10-431-952-21

```

Query Match	37.4%	Score 329;	DB 14;	Length 914;
Best Local Similarity	64.5%	Pred. No. 1.9e-98;		
Matches 491; Conservative	0;	Mismatches 270;	Indels 0;	Gaps 0

QY 19 TTGTATATGAGCTCAATGCTTCTTGACAAACATGTTTGACCACGAGATTCCGAGTT 78
| | | | |
Db 10 TTTGATGCATCAGTACTAGTAATTTTCAAGCATTTGTCAGGCCCTCGAGATACTAGTA 69

QY	72	CGGGGGGGTCCGTGGACCTTAACCTTCCACCTTCAATCCCAACATCAATGACCTG	138
Db	70	AAAGATGGTTCTTCTGGACAAATTAATATACCAATTATATCTGTCTGTGCATATATTTA	129
QY	139	CTCTCGATATGCGTGGGTAAACAAGTACATGAAGAACAAGCGCTGTCTGTCTCTCAGAGGC	138
Db	130	CTAATGTATGGCTGGACCAAAATACATGAGGATTAACAGCCATCTCTTGGCGGGG	189
QY	199	ATCCACCTTGATTAACCTGGCAATCAACTCTTTCTGTGGTATATGCTGGAGCTC	258
Db	190	ATTTTGTGGGTATTAACCTTGAATCACAATGCTGTCTGTATATATTTCTGTGAGTTA	249
QY	259	ATCCCTCCAGCTGGGAAGAGGTACAACTTGCATGTCCGAATTCGACAGTGCAGA	318
Db	250	GTAACAGAGATATGGGAAGGCAAAATACAACTTCTGTGTGAGGCACACGCACGACAGA	309
QY	319	GAAGGTGATGTCCGGGTACCAAGCTCTTGTGGGTGATACATCTTCCCAACTAGTGGAG	378
Db	310	GAATCAGATATGAAGTATATCCGTCTCTGGGTGATATATCTTCCAACTCATATGAA	369
QY	379	TTCCCTGACACGATTTTCTTGTGTGTACGAAAAAGACCAATCAGATCACCTTCTTCAT	438
Db	370	TTTATGACATTTCTTCTTATCCTGTGGCAAGAACCAACAGATCAAGTCTGTAC	429
QY	439	GTCTATACCAACGCTCCATGTTCAACATCTGTGGTGTGTTTGAACGTGATACCTGT	488
Db	430	GTCTACCAACATGCCCTCGATGCTGAACATCTGGGTGTGTGGAAGAACTGGTCCCTGC	489
QY	499	GGTCAAGCTCTTTGGAACCAACCGCTGAACGTTTATCCACATTCATCATGTACTCTAC	558
Db	490	GGCACCTCTTATTTGTGTGACCACTTAATAGCTTCATCAGCTGTCTCATGTACTCTAC	549
QY	559	TACGCGCTGTCTGTGTTCCGTCATGCAATGCAAGATACCTTGTGTGAAGAAGTACTACA	618
Db	550	TATGTTTGTCTCAATGCCCTTCCATGCTGCATACCTCTGTGTGAAGAAGTATCATCT	609
QY	619	CAGGCTACCTGTGAGTGTGTACTACCAATACGCAACGCTGAAGTCCGATGTAAG	678
Db	610	CAGGGGAGCTGCTTCAAGTTTGTGTGTGCAATCATCAAGCACTGCTGGGGTCAATGG	669
QY	679	CCCTGTGGCTTCCCTTGGCTGTCTCATCTTCAGTCTTCATATATGATGACGCTGTC	738
Db	670	CCGTGACAAATCCCTCTTGTTGGTGTGTATTCAGATGTGATTCATTAATTTCCCTGATT	729
QY	739	ATCCTGTCTTAACTCTCATATTCAGACATACCGGAAAA	779
Db	730	GCTCTTTCAAACTTCTCAATTAAGCTTACACAAAGAA	770

Search completed: April 1, 2004, 10:45:02
Job time : 375.044 secs


```

Db 241 TATAATGCTGGAGAGCTCATCTCTCCAGCTGGAGAGAGGATTACCACTTGCACTGTCAG 300
Qy 301 AATCTGACAGTGAAGAGAGAGTATGTCGGGGTACCAAGTCTTGAGTGGTACTAC 360
Db 301 AATCTGACAGTGAAGAGAGTATGTCGGGGTACCAAGTCTTGAGTGGTACTAC 360
Qy 361 TTCTCCAACTAGTGAAGTTCCTGACACAGATTTCTTTGTTCTACGAAAAAGCCAAAT 420
Db 361 TTCTCCAACTAGTGAAGTTCCTGACACAGATTTCTTTGTTCTACGAAAAAGCCAAAT 420
Qy 421 CAGATCACTCTCTCAATGTCATCAACGAGTCCAGTCAATGTCATCAATCTGGTGGT 480
Db 421 CAGATCACTCTCTCAATGTCATCAACGAGTCCAGTCAATGTCATCAATCTGGTGGT 480
Qy 481 TTGAAGTGAATACCTTGAGTCAAGCTTTTGGACCCACCTGACAGCTTTATCCAC 540
Db 481 TTGAAGTGAATACCTTGAGTCAAGCTTTTGGACCCACCTGACAGCTTTATCCAC 540
Qy 541 ATTCTCATGTAATCTCTAATGAGCTCTGTTCCGCTCATGCAAGTACTTTGG 600
Db 541 ATTCTCATGTAATCTCTAATGAGCTCTGTTCCGCTCATGCAAGTACTTTGG 600
Qy 601 TGGAGAGTACCTCAACAGAGCTCAAGTGGTGAAGTGTACTGACCATCAGCAGAC 660
Db 601 TGGAGAGTACCTCAACAGAGCTCAAGTGGTGAAGTGTACTGACCATCAGCAGAC 660
Qy 661 CTGAGTCCGCTGGTGAAGCCCTGCTGCTTCCCTTTGCTGCTCATCTTCCAGTCTTC 720
Db 661 CTGAGTCCGCTGGTGAAGCCCTGCTGCTTCCCTTTGCTGCTCATCTTCCAGTCTTC 720
Qy 721 TATATGATGAGCGTGTGATCCTGTTCTTAATCTCTAATGTCATCAATCAACGAGAAAG 780
Db 721 TATATGATGAGCGTGTGATCCTGTTCTTAATCTCTAATGTCATCAATCAACGAGAAAG 780
Qy 781 CCAAGTGAAGAGAGTGCAGAGAGAGAGAGAGAGATGTTTCCCAAGCCCACTTA 840
Db 781 CCAAGTGAAGAGAGTGCAGAGAGAGAGAGAGAGATGTTTCCCAAGCCCACTTA 840
Qy 841 ATTGTGCTAATGGCATGACGACAGAGAGAGGCTCAATTA 879
Db 841 ATTGTGCTAATGGCATGACGACAGAGAGAGGCTCAATTA 879

```

RESULT 2

```

; Sequence 6, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 900
; TYPE: DNA
; ORGANISM: Mus musculus
; US-09-903-456-6

```

Query Match 39.2%; Score 345; DB 4; Length 900;
 Best Local Similarity 65.8%; Pred. No. 2.3e-97;

```

Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;
Qy 19 TTTGATATGATGATCATGCTTTCTTGAGCAACATGTTGGACACAGATTCGAGTT 78
Db 10 TTGATGCTGCTACTAGTATCCTATTTCAGAGCCTTCTGGGCCCCAGATACAGAGTGC 69
Qy 79 CCGGGGTGTTCTCTGAGTCTTACCTTCCACCTTCAATCTCAACATCAGTACTG 138
Db 70 AAGAGATGTTCTCTCTGAGCAATTAATCCTTCAAGTTTCTCTTATTTACTTGA 129
Qy 139 CTCTGATATGCTGAGTGAACAGATGACAGAGAGAGAGAGAGAGAGAGAGAGAG 198
Db 130 CTCTGATATGCTGAGTGAACAGATGACAGAGAGAGAGAGAGAGAGAGAGAGAG 189
Qy 199 ATCTCAGCTTGTATTAACCTGCAATCAACCTTCTTCTGAGTATGCTGAGAGTTC 258
Db 190 ATCTCAGCTTGTATTAACCTGCAATCAACCTTCTTCTGAGTATGCTGAGAGTTC 249
Qy 259 ATCTCTCAGCTGAGAGAGAGTGAACATTTGACAGTGTCAAGATCTGACAGTGA 318
Db 250 GTGACAGTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 309
Qy 319 GAAGTGAATGTCGGGTAGCCAAAGTCTTGTGAGTACTACTTCTCCAACTAGTGA 378
Db 310 GAATCCGATATGAATATCATCGGCTCTCTGAGTACTACTTCTCCAACTAGTGA 369
Qy 379 TTCTGAGACAGATTTCTTGTGTTCTACGAAAAAGCAATCAATCAATCAATCTT 438
Db 370 TTCTGAGACAGATTTCTTGTGTTCTACCTTGCAAGAGCAACCAAGATCAACCTG 429
Qy 439 GTCTATCAACAGAGCTCATGTTCAACATCTGGAGTGTGTTGAACTGGATCTGT 498
Db 430 GTCTATCAACAGAGCTCATGTTCAACATCTGGAGTGTGTTGAACTGGATCTGT 489
Qy 499 GGTCAAGCTTCTTGTGAACCAACCTGAGAGCTTATCAACATCTGATGATCTGAT 558
Db 490 GGTCAATCAATTTGTGAGCAACTCAACAGCTTCAATCAATCTGATGATCTGAT 549
Qy 559 TACGCTGTCTGTGTTCCCTGCTGATGACAGAGTACCTTGTGAGAGAGTACTACA 618
Db 550 TACGCTGTCTGTGTTCCCTGCTGATGAGTGTGCTTCACTGTGAGAGAGTACTACA 609
Qy 619 CAGGCTCAGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 678
Db 610 CAGGCTCAGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 669
Qy 679 CCTGTGCTTCCCTTGTGCTGTCTCACTTCCAGTCTTCTTATGATGATGATGAT 738
Db 670 CCAATGCTCTTCTCTCTGAGGAGTGTGTTCTTCCAGATGATGATGATGATGAT 729
Qy 739 ATCTGTTCTTAATCTGATATGATGATGATGATGATGATGATGATGATGATGAT 779
Db 730 GCTCTCTTCAAACTTCAATCAATCAATCAATCAATCAATCAATCAATCAAT 770

```

RESULT 3

```

; Sequence 21, Application US/09769863
; Patent No. 6635451
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; APPLICANT: Thurmond, Jennifer
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763.US.01
; CURRENT APPLICATION NUMBER: US/09/769,863
; PRIOR FILING DATE: 2001-01-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21

```

LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-09-769-863-21

Query Match 37.4%; Score 329; DB 4; Length 914;
Best Local Similarity 64.5%; Pred. No. 2.2e-92;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

19 TTTGATATGAGTCATGCTTTCTTGGACAAATGTTTGACAGAGATTTCTGAGTT 78
10 TTTATGATGATGCTGAGGACCAAAATACATGAGAAATTAACAGCATTTCTGCGGGG 69
79 CGCGGGTGTCTCTGCTGAGACTTTACCTTCCACCTGATCTCTGACATCAAGTACCTG 138
70 AAAGATGTTCTTCTGAGCAATTAATACCAATTTATCTGCTCTGCTATATTTTA 129
139 CTCTGATATGCTGGGTAAACAGTATAGTAAGAAACAGGCTGCTGCTCTCAAGGGC 198
130 CTAATGATGCTGAGGACCAAAATACATGAGAAATTAACAGCATTTCTGCGGGG 189
199 ATCTGACCTGTATTAACCTGCAATGACATCTTTCTGCGTATATGCTGAGGCTC 258
190 ATTATGATGATTAACCTGCAATGACATCTTTCTGCGTATATGCTGAGGCTC 249
259 ATCTGACCTGTATTAACCTGCAATGACATCTTTCTGCGTATATGCTGAGGCTC 318
250 GTAACAGATATGAGGAAAGCAATTAACATCTTTCTGCGTATATGCTGAGGCTC 309
319 GAAAGATATGCTGGGTAAACAGTATAGTAAGAAACAGGCTGCTGCTCTCAAGGGC 378
310 GAATCAGATATGAGGAAAGCAATTAACATCTTTCTGCGTATATGCTGAGGCTC 369
379 TTCTGACCAAGTATTTCTTGTCTGAGAAATAAGCAATGACATCTTTCTGAGT 438
370 TTTATGACATCTTTCTTGTCTGAGAAATAAGCAATGACATCTTTCTGAGT 429
439 GTCTATACCAAGGATGCTGAGGAAAGCAATGACATCTTTCTGAGT 498
430 GTCTATACCAAGGATGCTGAGGAAAGCAATGACATCTTTCTGAGT 489
499 GGTCAAGCTCTTTGGAACCAAGCTGATTAACATCTTTCTGAGT 558
490 GGTCAAGCTCTTTGGAACCAAGCTGATTAACATCTTTCTGAGT 549
559 TACGCGCTGTCTGTTCCGCTGATGACCAAGTATGTTGTAAGAAAGTACTGACA 618
550 TATGTTGTGTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 609
619 CAGGCTGAGTGTGAGTGTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 678
610 CAGGCTGAGTGTGAGTGTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 669
679 CCGTGTGCTTCCCTTTGCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 738
670 CCGTGTGCTTCCCTTTGCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 729
739 ATCTGTTCTTAACCTTATATGACATTAACCGGAAAAA 779
730 GCTCTCTTCAAACTTCTATGACATTAACCGGAAAAA 770

RESULT 4
US-09-903-456-3
Sequence 3, Application US/09903456
Patent No. 6677145
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-yeons
APPLICANT: Huang, Yung-sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407.US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 03/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-09-903-456-3

Query Match 37.4%; Score 329; DB 4; Length 914;
Best Local Similarity 64.5%; Pred. No. 2.2e-92;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

19 TTTGATATGAGTCATGCTTTCTTGGACAAATGTTTGACAGAGATTTCTGAGTT 78
10 TTTATGATGATGCTGAGGACCAAAATACATGAGAAATTAACAGCATTTCTGCGGGG 69
79 CGCGGGTGTCTCTGCTGAGACTTTACCTTCCACCTGATCTCTGACATCAAGTACCTG 138
70 AAAGATGTTCTTCTGAGCAATTAATACCAATTTATCTGCTCTGCTATATTTTA 129
139 CTCTGATATGCTGGGTAAACAGTATAGTAAGAAACAGGCTGCTGCTCTCAAGGGC 198
130 CTAATGATGCTGAGGACCAAAATACATGAGAAATTAACAGCATTTCTGCGGGG 189
199 ATCTGACCTGTATTAACCTGCAATGACATCTTTCTGCGTATATGCTGAGGCTC 258
190 ATTATGATGATTAACCTGCAATGACATCTTTCTGCGTATATGCTGAGGCTC 249
259 ATCTGACCTGTATTAACCTGCAATGACATCTTTCTGCGTATATGCTGAGGCTC 318
250 GTAACAGATATGAGGAAAGCAATTAACATCTTTCTGCGTATATGCTGAGGCTC 309
319 GAAAGATATGCTGGGTAAACAGTATAGTAAGAAACAGGCTGCTGCTCTCAAGGGC 378
310 GAATCAGATATGAGGAAAGCAATTAACATCTTTCTGCGTATATGCTGAGGCTC 369
379 TTCTGACCAAGTATTTCTTGTCTGAGAAATAAGCAATGACATCTTTCTGAGT 438
370 TTTATGACATCTTTCTTGTCTGAGAAATAAGCAATGACATCTTTCTGAGT 429
439 GTCTATACCAAGGATGCTGAGGAAAGCAATGACATCTTTCTGAGT 498
430 GTCTATACCAAGGATGCTGAGGAAAGCAATGACATCTTTCTGAGT 489
499 GGTCAAGCTCTTTGGAACCAAGCTGATTAACATCTTTCTGAGT 558
490 GGTCAAGCTCTTTGGAACCAAGCTGATTAACATCTTTCTGAGT 549
559 TACGCGCTGTCTGTTCCGCTGATGACCAAGTATGTTGTAAGAAAGTACTGACA 618
550 TATGTTGTGTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 609
619 CAGGCTGAGTGTGAGTGTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 678
610 CAGGCTGAGTGTGAGTGTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 669
679 CCGTGTGCTTCCCTTTGCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 738
670 CCGTGTGCTTCCCTTTGCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 729
739 ATCTGTTCTTAACCTTATATGACATTAACCGGAAAAA 779
730 GCTCTCTTCAAACTTCTATGACATTAACCGGAAAAA 770

QY 727 ATGAGCTGTGATCCTCTCTCTTAACCTTATATGACATACGAGAAAAGCAGTG 786
 DB 742 ATACCTTGCTGCCCCCTCTTGCGACATTTTGTGACAGACTATCTTAAAGGCCAAA 801
 QY 787 AAGAAAGAG 795
 DB 802 AAGAGCAAG 810

RESULT 7

US-09-903-456-71
 ; Sequence 71, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FASTSEQ for Windows Version 4.0
 ; SEQ ID NO: 71
 ; LENGTH: 818
 ; TYPE: DNA
 ; ORGANISM: Thraustochytrium aureum
 ; US-09-903-456-71

Query Match 13.2%; Score 116.2; DB 4; Length 818;
 Best Local Similarity 51.7%; Pred. No. 4e-26;
 Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 130 CTCAGGGGCAATCTTCACCTTGTATTAACCTGCAATCACTTCTTTCTGGCTATATGCTG 249
 DB 204 CTCAGAGCAATCAAGCTTCTGCAACATCTTCTCTCGACCTTCTTGTACATGCTG 263
 QY 250 GTGAGCTCATCTCTCTCCAGCTGGAGAGAGATTACACTTGACATGCTCAGATCTCGAC 309
 DB 264 GTGAGAGCAATCCGACAGCTATCTCGAGAGCTACAAAGTTTGGAAACGACATGGAG 323
 QY 310 AGTCAAGAGAAAGTATGTCGGG--TAGCCAAAGTCTTGAGTGTGATCTATCTTCC 366
 DB 324 AAGGCAACGAGTCTCATGCTCAGGCGCATGCTCGCATCGTATCGTATCGTATCGTCC 383
 QY 367 AAAGTAGAGAGTCTCTGACACAGATTTCTTTGTACGAAAAAGACCAATCAATC 426
 DB 384 AAGGCAATCGAGTTTGTGATACCGCCATCATGATCTTTGCAAGAAAGTTCAACCGATT 443
 QY 427 ACCCTCTTCAATGTCTATACACAGCGCTCATGTTCAACATCTGAGTGTGTTTGAAC 486
 DB 444 TCTCTTGTGAAAGTATACACACAGCCACATTTTTCGATCTGAGGCTATATGCGCAAG 503
 QY 487 TGGATACCTTGTGTGCAAAAGCTTCTTTGAGACCACTTGAAACAGCTTATACCAATCTC 546
 DB 504 TAGGCTCAGAGAGGTGATGCGTACTTTCAAGTATCTTCAACTCTTTCGTCACACCGTC 563
 QY 547 ATGTAATCTTACTACGAGCTGTGCTGTGTTCCCTGTCATGCAAGTACCTTTGAGTGAAG 606
 DB 564 ATGTAATCTTACTATTTCTTCTCTCCCAAGAGGTTCGGGTTCGTAAGC---CAATCAAG 620
 QY 607 AAGTACTCTACACAGAGCTCAGCTGTGATGATTTGCTACTACACATCAGCAGACGCTGAGT 666
 DB 621 CGTATCATCACACACCTTCAAGATGATGACCAAGTTCATGCAATGCTTGTGACAGTCTTGTATC 680

QY 667 GCGGTGTAAGAGCCCTGTGAGCTTCCCTTTGAGCTGTATCTTCCAGCTTCTCTATATG 726
 DB 681 GACTACCTCTTCCATGCGATGACCAAGAGCTTGTGACAGTTTGTGAGTGTACATG 740
 QY 727 ATGAGCTGTGATCCTCTCTCTTAACCTTATATGACATACCGAGAAAAGCAGTG 786
 DB 741 ATCACTTGTGCCCCCTCTTGCGCACTTTTGTGACAGACTATCTTAAAGGCCAAA 800
 QY 787 AAGAAAGAG 795
 DB 801 AAGAGCAAG 809

RESULT 8

US-09-903-456-69
 ; Sequence 69, Application US/09903456
 ; Patent No. 6677145
 ; GENERAL INFORMATION:
 ; APPLICANT: Abbott Laboratories
 ; APPLICANT: Mukerji, Pradip
 ; APPLICANT: Leonard, Amanda Eun-Yeong
 ; APPLICANT: Huang, Yung-Sheng
 ; APPLICANT: Pereira, Suzette L.
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
 ; FILE REFERENCE: 6407 US P3
 ; CURRENT APPLICATION NUMBER: US/09/903,456
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US 09/624,670
 ; PRIOR FILING DATE: 2000-07-24
 ; PRIOR APPLICATION NUMBER: US 09/379,095
 ; PRIOR FILING DATE: 1999-08-23
 ; PRIOR APPLICATION NUMBER: US 09/145,828
 ; PRIOR FILING DATE: 1998-09-02
 ; NUMBER OF SEQ ID NOS: 116
 ; SOFTWARE: FASTSEQ for Windows Version 4.0
 ; SEQ ID NO: 69
 ; LENGTH: 819
 ; TYPE: DNA
 ; ORGANISM: Thraustochytrium aureum
 ; US-09-903-456-69

Query Match 13.2%; Score 116.2; DB 4; Length 819;
 Best Local Similarity 51.7%; Pred. No. 4e-26;
 Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 190 CTCAGGGGCAATCTTCACCTTGTATTAACCTGCAATCACTTCTTTCTGGCTATATGCTG 249
 DB 205 CTCAGAGCAATCAAGCTTCTGCAACATCTTCTCTCGACCTTCTTGTACATGCTG 264
 QY 250 GTGAGCTCATCTCTCTCCAGCTGGAGAGAGTTTCAACTTGACATGCTCAGATCTCGAC 309
 DB 265 GTGAGAGCAATCCGACAGCTATCTCGAGGCTTACAAAGTTTGGAAACGACATGGAG 324
 QY 310 AGTCAAGAGAAAGTATGTCGGG--TAGCCAAAGTCTTGAGTGTGATCTATCTTCC 366
 DB 325 AAGGCAACGAGTCTCATGCTCAGGCGCATGCTCGCATCGTATCGTATCGTATCGTCC 384
 QY 367 AAAGTAGAGAGTCTCTGACACAGATTTCTTTGTCTACGAAAAAGACCAATCAATC 426
 DB 385 AAGGCAATCGAGTTTGTGATACCGCCATCATGATCTTTGCAAGAAAGTTCAACCGATT 444
 QY 427 ACCCTCTTCAATGTCTATACACAGCGCTCATGTTCAACATCTGAGTGTGTTTGAAC 486
 DB 445 TCTCTTGTGAAAGTATACACAGCCACATTTTTCGATCTGAGGCTATATGCGCAAG 504
 QY 487 TGGATACCTTGTGTCAAAAGCTTCTTTGAGACCACTTGAAACAGCTTATACCAATCTC 546
 DB 505 TAGGCTCAGAGAGGTGATGCGTACTTTTGTGATGATCTTCAACTCTTTCGTCACACCGTC 564
 QY 547 ATGTAATCTTACTACGAGCTGTGCTGTGTTCCCTGTCATGCAAGTACCAAGTCTTGTGAG 606
 DB 565 ATGTAATCTTACTATTTCTTCTCTCCCAAGAGGTTCGGGTTCGTAAGC---CAATCAAG 621

QY 607 AAGTACCTACACAGAGCTGAGTGTGAGTGTGATGACTGACATGACGACAGCTGAGT 666
DB 622 CCGTACATACACACCCCTTTCAGATGACCCAGTTCATGCAATGCTGTGAGCTGATGAC 681
QY 667 GCCGTGATGAAAGCCCTGTGCTTCCCTTTGCTGTCTCATCTTCCAGCTTCCATATG 726
DB 682 GACTACCTCTTCCATGCGACTGACCAAGGCTTGTGACACTTGTGAGTGTGATG 741
QY 727 ATGAGCTGTGATCCTGCTTAACTTCTATATTCAGACATACCGGAAAAAGCCAGT 786
DB 742 ATCACCCTGCTGCTTCCCTTTCGCACTTTTGTGCAAGCTATCTTAAAAAGCCAAA 801
QY 787 AAGAAAGAG 795
DB 802 AAGAGCAAG 810

RESULT 9

US-09-903-456-72
Sequence 72, Application US/09903456
Patent No. 6677145
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407, US, P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 72
LENGTH: 819
TYPE: DNA
ORGANISM: *Thraustochytrium aureum*
US-09-903-456-72

Query Match 13.2%; Score 116.2; DB 4; Length 819;
Best Local Similarity 51.7%; Pred. No. 4e-26;
Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 190 CTCAGGGGCAATCCTCCTGATGTAATACCTGCAATCACAATCTTCTGCTATATGCTG 249
DB 205 CTCAGACCATCAAGCTTGTGACACTTGTCTTCTGAGACTTTCCTGTATGATGTC 264
QY 250 GTGAGCTCATCTCTCCAGCTGGGAGAGAGTTACACTTGCAGTGCAGATCTGCAG 309
DB 265 GTGAGACCATCCCGCAGGCTATCTGAGGCTACCAAGTGTGGAAGACATGAG 324
QY 310 AGTCCAGAGAGAGTGTATCTCCGG---TAGCCAAAGTCTTGTGTGAGTACTTCTCC 366
DB 325 AAGGCAACAGTGTCTGCTGAGGAGTGTGCGATGCTGTGATGCTGTCTAGCTGTCC 384
QY 367 AACTAGTGAAGTCTGAGACAGATTTTCTTGTCTACGAAAAAAGCAATGAGATC 426
DB 385 AAGGCATACGAGTCTTGTGATACCGCATCATATCTTTGCAAGAGTTCAACAGGTT 444
QY 427 ACCTTCTCATGTCTATACACAGGCTCATGTTCATCAATCTGTGTGTGTGTAAC 486
DB 445 TCCCTTGTGATGTGATGACCAAGTGTGACCGATTTTGTGCAATCTGTGGGCTATCCGCAAG 504
QY 487 TGAATACCTGTGTGTAAGGCTTGTGAGCCACCGTGAACAGCTTATCCATTTCTC 546
DB 505 TACGCTCAGAGAGGTATGCTACTTTTCAAGTATCTCACTTTTGTGTGACACCGTTC 564

QY 547 ATGTACTCTACTAGAGCCCTGTGTGTGTTCCGTCATGACCAAGTACTTTGTGGAAG 606
DB 565 ATGTAGCATACTACTTCTTCTTCCCAAGAGTTCGGGTTCTGGAAGC---CAATCAAG 621
QY 607 AAGTACCTACACAGGCTCAGTGTGAGTGTGATGCTGACATACAGCAACAGCTGAGT 666
DB 622 CCGTACATACACACCCCTTTCAGATGACCCAGTTCATGCAATGCTGTGAGCTGATGAC 681
QY 667 GCCGTGATGAAAGCCCTGTGCTTCCCTTTGCTGTCTCATCTTCCAGCTTCCATATG 726
DB 682 GACTACCTCTTCCATGAGACTGACCAAGGCTTGTGACAGCTTCTTGTGATGATG 741
QY 727 ATGAGCTGTGATCCTGCTTAACTTCTATATTCAGACATACCGGAAAAAGCCAGT 786
DB 742 ATCACCCTGCTGCTTCCCTTTCGCACTTTTGTGCAAGCTATCTTAAAAAGCCAAA 801
QY 787 AAGAAAGAG 795
DB 802 AAGAGCAAG 810

RESULT 10

US-09-903-456-73
Sequence 73, Application US/09903456
Patent No. 6677145
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407, US, P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR FILING DATE: 1999-08-23
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 116
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 73
LENGTH: 819
TYPE: DNA
ORGANISM: *Thraustochytrium aureum*
US-09-903-456-73

Query Match 13.2%; Score 116.2; DB 4; Length 819;
Best Local Similarity 51.7%; Pred. No. 4e-26;
Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 190 CTCAGGGGCAATCCTCCTGATGTAATACCTGCAATCACAATCTTCTGCTATATGCTG 249
DB 205 CTCAGACCATCAAGCTTGTGACACTTGTCTTCTGAGACTTTCCTGTATGATGTC 264
QY 250 GTGAGCTCATCTCTCCAGCTGGGAGAGAGTTACACTTGCAGTGCAGATCTGCAG 309
DB 265 GTGAGACCATCCCGCAGGCTATCTGAGGCTACCAAGTGTGGAAGACATGAG 324
QY 310 AGTCCAGAGAGAGTGTATCTCCGG---TAGCCAAAGTCTTGTGTGAGTACTTCTCC 366
DB 325 AAGGCAACAGTGTCTGCTGAGGAGTGTGCGATGCTGTGATGCTGTCTAGCTGTCC 384
QY 367 AACTAGTGAAGTCTGAGACAGATTTTCTTGTCTACGAAAAAAGCAATGAGATC 426
DB 385 AAGGCATACGAGTCTTGTGATACCGCATCATATCTTTGCAAGAGTTCAACAGGTT 444
QY 427 ACCTTCTCATGTCTATACACAGGCTCATGTTCATCAATCTGTGTGTGTGTAAC 486
DB 445 TCCCTTGTGATGTGATGACCAAGTGTGACCGATTTTGTGCAATCTGTGGGCTATCCGCAAG 504

QY 487 TGGATACCTTGTGTGCAAGCTCTTTGGAGCCACCCTGAAAGCTTTATCCATCTTC 546
| | | | |
Db 505 TAGGCTCCAGAGATGATGCGTACTTTTCAATGATCTTCACTCTTTGTGCAACCGTC 564
| | | | |
QY 547 ATGTACTCTTACTACGCGCTGTGTGTGTTCCCGTCATGCAAGTACCTTTGTGGAAG 606
| | | | |
Db 565 ATGTAGCGATACTACTTCTTCTCCCAAGGGTTGCGGTGCGTGAACG---CAATCAAG 621
| | | | |
QY 607 AAGTACCTGACACAGGCTGAGCTGAGTGCATGCTGACTGACCATGACGACAGCTGAGT 666
| | | | |
Db 622 CCGTACATCACACACCTTCAATGATGACCACTTCAATGCAATGCTTGTGCAATCTTGTAC 681
| | | | |
QY 667 GCCGTGTGAAAGCCCTGTGCTTCCCTTTGGCTGTCTCATCTTCCAGTCTTCTTAATG 726
| | | | |
Db 682 GACTACCTCTTCCATGACGACTACCAAGGCTCTTGTGAGCTTCTTGAATGATG 741
| | | | |
QY 727 ATGACGCTGTATCTCTTCTTTAACTTCTATATTCAGACATACCGGAAAAAGCCAGTG 786
| | | | |
Db 742 ATGACCTGTGCTGCTCTTCCGCAACTTTTGTGAGAGCTATCTTAAAAAGCCAAAA 801
| | | | |
QY 787 AAGAAAGAG 795
| | | | |
Db 802 AAGAGCAAG 810
| | | | |

RESULT 11

US-09-903-456-74
; Sequence 74, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suresh L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 819
; TYPE: DNA
; ORGANISM: *Thraustochytrium aureum*
US-09-903-456-74

Query Match 13.2%; Score 116.2; DB 4; Length 819;
Best Local Similarity 51.7%; Pred. No. 4e-26;
Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 190 CTAGGGGATCTCTCACTTGTATTAACCTGCAATACACTTCTTTCGCTAATGTG 249
| | | | |
Db 205 CTCAAGACATCAAGCTCTTGACAACTTCTTCTTCTGCACTTCTTGTACATGTGC 264
| | | | |
QY 250 GTGAGGTCTATCTCTCCAGCTGAGAGAGAGTTCAACTTCAGATGTCAGATGTGAC 309
| | | | |
Db 265 GTGTGACATCCGCGGATATCTCTGAGAGGCTACAAAGTTTGGAAAGCATGTGAG 324
| | | | |
QY 310 AGTCAGAGAGAGATGATCCGGG---TAGCCAAAGCTTTGTGATGATCTTCTCC 366
| | | | |
Db 325 AAGGGCAAGAGTCTATGCTGAGGAGATGTCCGATGCTAGCTGTCTTACAGTGTCC 384
| | | | |
QY 367 AAATGATGAGTTCCTGAGCAAGATTTCTTGTCTACGAAAAAAGCAATAGATC 426
| | | | |
Db 385 AAGGCAATAGAGTTCTTGATACCGGCATCATGATCTTGTGAAAGAGTTCAACAGGTT 444
| | | | |

QY 427 ACCTTCCTCATGTTCTATCACCAGCGTCCATGTTCAACATCTGATGTGTTTGAAC 486
| | | | |
Db 445 TCTCTTTCGATGATGTATACCATGATGCCACATTTTGTGCATCTGTGGGATATGCCAAG 504
| | | | |
QY 487 TGGATACCTTGTGTCAAGCTTCTTTGAGACCCACCTGAAAGACTTTATTCATCTTC 546
| | | | |
Db 505 TAGGCTCCAGAGATGATGCGGACTTTCATGTATCTTCAACTCTTTGTGCAACCGTC 564
| | | | |
QY 547 ATGTACTCTTACTACGCGCTGTGTGTTTCCCGTCAATGCAAGTACCTTTGTGGAAG 606
| | | | |
Db 565 ATGTAGCGATACTACTTCTTCTCTCCCAAGGTTCCGGTTCTGTGAACG---CAATCAAG 621
| | | | |
QY 607 AAGTACCTGACACAGGCTCACTGTGTGAGTGTGACTACCAATACGACGACGCTGAGT 666
| | | | |
Db 622 CCGTACATCACACACCTTCAATGATGACCAAGTTCAAGGAATGTTGTGAGATCTTGTAC 681
| | | | |
QY 667 GCCGTGTGAAAGCCCTGTGCTTCCCTTTGGCTGTCTCATCTTCCAGTCTTCTTAATG 726
| | | | |
Db 682 GACTACCTTCTCCATGAGACTACCCACAGGCTCTTGTGAGCTTCTTGAAGTGTACATG 741
| | | | |
QY 727 ATGACGCTGTATCTCTTCTTTAACTTCTATATTCAGACATACCGGAAAAAGCCAGTG 786
| | | | |
Db 742 ATGACCTGTGCTGCTCTTCCGCAACTTTTGTGAGAGCTATCTTAAAAAGCCAAAA 801
| | | | |
QY 787 AAGAAAGAG 795
| | | | |
Db 802 AAGAGCAAG 810
| | | | |

RESULT 12

US-09-149-476-258
; Sequence 258, Application US/09149476
; Patent No. 6420526
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P.
; CURRENT APPLICATION NUMBER: US/09/149,476
; CURRENT FILING DATE: 1998-09-08
; EARLIER APPLICATION NUMBER: PCT/US98/04493
; EARLIER FILING DATE: 1998-03-06
; EARLIER APPLICATION NUMBER: 60/040,162
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,333
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/038,621
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,626
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,334
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,336
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/040,163
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: 60/047,600
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,615
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,597
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,502
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,633
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,583
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,617
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,618
; EARLIER FILING DATE: 1997-05-23
; EARLIER APPLICATION NUMBER: 60/047,503
; EARLIER FILING DATE: 1997-05-23

EARLIER APPLICATION NUMBER: 60/048,964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057,650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056,884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

Query Match 12.0%; Score 105.8; DB 4; Length 1482;
Best Local Similarity 51.5%; Pred. No. 1e-22;
Matches 295; Conservative 0; Mismatches 272; Indels 6; Gaps 2;

QY 92 TGCTGAGACTTTCACCTTCCACCTTCTCTCTCTCAAGGCGATCTCAGCTTGT
DB 167 TGGGGTCCCTTGTCTATGACCTTCATCTCTGACGTATGCTGCTCTCTC
QY 152 TGGGTAACAGTATACATGAGAGAGAGGCTCTCTCTCTCAAGGCGATCTCAGCTTGT
DB 227 TTGGGCTCGATATGCTATGAGAGAGGCTCTCTCTCAAGGCGATCTCAGCTTGT
QY 212 ATAACTGCAATCACACTTCTCTGCGTATGCTGAGAGCTCATCTCTCAGCT
DB 287 ACACTTCTCAGCTGAGAGCTCTCTCTCAATGCTATGAGTCTCTGATGTGGGCT
QY 272 GGGAGAGAGTTAAATTGCAAGTTCAGATCTCAGAGTGAAGAGAGAGTGT--- 328
DB 347 GGGTGAACCTTAATCTGAGAGGCTGAGAGCTCTGAGCTATTCAGAGCTCTGAGGAC
QY 329 TCCGGTGAAGCAAGTCTTGTGAGTACTTCTCAAGTCTGAGAGTCTCTGAGCA
DB 407 TTAGAGATGTTGGGCTGGCTGCTCTCTCTCTCAAGTCTCTGAGTGAAGCA 466
QY 389 CGATTTCTTTGTTCTACGAAAAAGACCAATCAATCACTTCTCTCAATGCTATCAC 448
DB 467 CAGGATCTTATCTCTCGAAGAGAGAGAGGAGTGAACCTTCTCAATGCTATCAC 526
QY 449 ACGGCTGATGTTCAATCATCTGAGTGTGTTTGAACGAGTACTTGTGCTCAAGCT 508
DB 527 ACTCTGTCTCTCTGAGCTGAGTGTGAGGAGTAAAGTGTGCTGAGAGAGAGGCT 586
QY 509 TCTTGAACCAAGCTCTTATTCACATCTCTCAATGCTCTCTCTCAAGGCTGT 568
DB 587 CTTCATGCGCATATTAATCTCTGAGTGAATGTAACCTGTAAGGATAT 646
QY 569 CTGAGT---CCGCTCATGACAGAGTCTTGTGAGAGAGTACTCAACAGGCTC 625
DB 647 CTGCTTTGGCCCTGTGAGCAACCTTGTGAGAGAGAGAGAGAGAGAGGCTATTC 706
QY 626 AGCTGTGAGTGTCTACTCAGCATCAGCACA 658
DB 707 AGCTATCAGTGTCTGTCTGCTCACTGACA 739

RESULT 13

US-09-149-476-106
Sequence 106, Application US/09149476
Patent No. 6420526
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 186 Human Secreted proteins
FILE REFERENCE: P2002P1
CURRENT APPLICATION NUMBER: US/09/149,476
CURRENT FILING DATE: 1998-09-08
EARLIER APPLICATION NUMBER: PCT/US98/04493
EARLIER FILING DATE: 1998-03-06
EARLIER APPLICATION NUMBER: 60/040,162
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,333

EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/038,621
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,626
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,334
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,336
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,163
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/047,600
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,615
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,597
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,502
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,633
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,583
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,617
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,618
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,503
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,592
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,581
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,584
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,500
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,587
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,492
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,598
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,613
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,582
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,596
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,612
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,632
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,601
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,580
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,568
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,314
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,569
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,311
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,671
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,674
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,669
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,312
EARLIER FILING DATE: 1997-04-11

```

/ EARLIER APPLICATION NUMBER: 60/043,313
/ EARLIER FILING DATE: 1997-04-11
/ EARLIER APPLICATION NUMBER: 60/043,672
/ EARLIER FILING DATE: 1997-04-11
/ EARLIER APPLICATION NUMBER: 60/043,315
/ EARLIER FILING DATE: 1997-04-11
/ EARLIER APPLICATION NUMBER: 60/048,974
/ EARLIER FILING DATE: 1997-06-06
/ EARLIER APPLICATION NUMBER: 60/056,886
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,877
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,889
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,893
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,630
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,878
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,662
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,872
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,882
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,637
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,903
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,888
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,879
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,880
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,894
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,911
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,636
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,874
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,910
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,864
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,631
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,845
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,892
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/057,761
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/047,595
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,599
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,588
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,585
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,586
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,590
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,594
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,589
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,593

```

```

/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/047,614
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/043,578
/ EARLIER FILING DATE: 1997-04-11
/ EARLIER APPLICATION NUMBER: 60/043,576
/ EARLIER FILING DATE: 1997-04-11
/ EARLIER APPLICATION NUMBER: 60/047,501
/ EARLIER FILING DATE: 1997-05-23
/ EARLIER APPLICATION NUMBER: 60/043,670
/ EARLIER FILING DATE: 1997-04-11
/ EARLIER APPLICATION NUMBER: 60/056,632
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,664
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,876
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,881
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,909
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,875
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,862
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,887
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/056,908
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/048,964
/ EARLIER FILING DATE: 1997-06-06
/ EARLIER APPLICATION NUMBER: 60/057,650
/ EARLIER FILING DATE: 1997-09-05
/ EARLIER APPLICATION NUMBER: 60/056,884
/ EARLIER FILING DATE: 1997-08-22
/ EARLIER APPLICATION NUMBER: 60/057,669
/ EARLIER FILING DATE: 1997-09-05
/ EARLIER APPLICATION NUMBER: 60/049,610
/ EARLIER FILING DATE: 1997-06-13
/ EARLIER APPLICATION NUMBER: 60/061,060
/ EARLIER FILING DATE: 1997-10-02

```

Query Match 12.0%; Score 105.8; DB 4; Length 1542;
 Best Local Similarity 151.5%; Pred. No. 1e-22;
 Matches 295; Conservative 0; Mismatches 272; Indels 6; Gaps 2;

```

QY 92 TGTGGACTCTTACCTTCCACCTTCACTCTCAACATCACTGCTCTCGATATGCG 151
DB 195 TGGGGTCCCTCTCTATATACCTCCATCTCTCTGACCTATGCTGCTCTCTCAG 254
QY 152 TGGGTAACAAGTATAGATAAGAACAGGCGCTGCTGCTCTCAGGGGATCCCACTTGT 211
DB 255 TTGGGCTCGCATATAGCTATATGCAAGCCCTTCCAGCTCTGCTTCAATGATGCT 314
QY 212 ATAACTCGCAATCAACATCTTCTGCGTATATGCTGTGAGCTCATCTTCCAGCT 271
DB 315 ACAACTTCTCACTGTGAGCACTCTCCCTACATGCTATATGAGTTCGATGTCGGCT 374
QY 272 GGAAGAAGGTAAATTTCAAGTTCAGAAATCTCGACAGTGAAGGAAGGATG--- 328
DB 375 GCGTAGAGCACTATACCTGAGCGCTGAGCCTGTGACCTATTCACAGCCCTGAGCAG 434
QY 329 TCCGGTAGCAAGCTTGTGTGTGTACTACTTCTCCAACTAGTGAATTCCTTGACA 388
DB 435 TTAGGATGCTTGGGTGGCTGGCTGGCTCTCTCTTCTTCCAAAGTTCATGAGCTGATGACA 494
QY 389 CGATTTCTTTGTCTCTAGAAAAAAGCAATAGATCACTTCTCTATGCTATGAC 448
DB 495 CAGTATCTTTATCTTCCGAAGAAGACGGGAGGTGACCTTCTTACATGCTTCCATC 554
QY 449 ACGGCTCATGTTCAACATCTGTGTGTGTGTTTGAACGTGAATCACTTGTGTCAAAGCT 508
DB 555 ACTGTGTCTTCCCTGTGAGCTGTGTGTGTGAGGAGTAAAGATGCCCCGGAGGAATGGCT 614

```

QY 509 TCTTGGACCCACCTGAGAGCTTTATCCATCTCATGTTACTCTTACAGGCGCTG 568
DB 615 CTTTCATGCGCATATTAACCTCTTCGCGATGATGATATGATCTCTGATCTGATAT 674
QY 569 CTGTGTT---CCGCTCATGACAGATGCTTTGGGAGAAAGTACTCAACAGGCTC 625
DB 675 CTGCTTTGGCCCTGTGGACCAACCTTACCTTTGGGAGAAAGACATGACAGCATTC 734
QY 626 AGCTGTGACAGTTCTGACTACCAATCAAGACA 658
DB 735 AGCTATCCAGTTTGTCTGTGCTCACTGACA 767

RESULT 14

US-09-023-655-430
Sequence 430, Application US/09023655
Patent No. 6607879

GENERAL INFORMATION:

APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/023,655

FILING DATE: HEREWITH

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Zeller, Karen J.

REGISTRATION NUMBER: 37,071

REFERENCE/DOCKET NUMBER: PA-0001 US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555

TELEFAX: (650) 845-4166

INFORMATION FOR SEQ ID NO: 430:

SEQUENCE CHARACTERISTICS:

LENGTH: 1812 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: URETTUT01

CLONE: 1658706

US-09-023-655-430

Query Match 12.0%; Score 105.8; DB 4; Length 1812;
Best Local Similarity 51.5%; Pred. No. 1.1e-22;
Matches 295; Conservative 0; Mismatches 272; Indels 6; Gaps 2;

QY 92 TGGTGAAGCTTCTCCACCTCATCTCATCAACATCAAGTACCTGCTTCAGATAGGC 151
DB 522 TGGGTCCTCCCTGCTATGATGATCTCTCTGACCTGATGATCTCTCTCTAC 581
QY 152 TGGGTAAAGTACATGAAGACAGGCTGCTCTCTCTCTCTGAGGGGCACTCTCTGT 211

DB 582 TTGGCCCTGSCATCATGCTAAATCGGAACCCCTCCAGCTCCGCTTCATGATTTGCT 641
QY 212 ATAACTTCGGAATCAACACTTTCTTCTGCTATATGTTGATGAGTCAATCCCTCACT 271
DB 642 ACAACTTCTACGTGGGCACTCTCCCTCTAATGTTCTATAGTTCTGATGCTGGCT 701
QY 272 GGAAGAGAGTTACACTTTCAGAGTTCAGATCTGACAGTGCAGAGAGAGTGTATG--- 328
DB 702 GGCATGAGCACTTATACCTGGCGCTGTGACCCCTGTGACATTTCAACAGCCCTGAGGAC 761
QY 329 TCCGGGTAGCAAGGCTCTTGTGTGTGATCTTCTTCCAACTAGTGAAGTTCTTGACA 388
DB 762 TTGAGATGTTCCGGGCGCTGCTCTCTCTCTTCCAACTAGTGAAGTGAAGACA 821
QY 389 CGATTTCTTGTGTTCTAGAAAAGAACCAATCAGATCACTCTCTCATGCTATCACC 448
DB 822 CAGTGAATCTTTATTTCTCCAAAAGAAAGCGGCAAGTACCTTCTTACATGCTTCCATC 881
QY 449 ACGCGTCATGTTCAACATCTGATGTTGTTTGAACGTATACCTTGTGTCAAAGCT 508
DB 882 ACTGTGCTTCCCTGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 941
QY 509 TCTTGGACCCACCCGAAACAGCTTATTCATCTCATGATGATGATGATGATGATGAT 568
DB 942 CTTTCATGCGCATGATTAACCTCTTCCGTCATGATGATGATGATGATGATGATGAT 1001
QY 569 CTGTGTT---CCGCTCATGACCAAGTACCTTGTGTAAGAGTACCTCAACAGGCTC 625
DB 1002 CTGCTTTGGCCCTGTGGGACCAACCTTACCTTTGATGAGAAAGACATGACAGCATTC 1061
QY 626 AGCTGTGACAGTTCTGACTACCAATCAAGACA 658
DB 1062 AGCTGATCCAGTTTGTCTGTGCTCACTGACA 1094

RESULT 15

US-09-769-863-22

Sequence 22, Application US/09769863

Patent No. 6635451

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Huang, Yung-Sheng

APPLICANT: Das, Tapas

APPLICANT: Thurmond, Jennifer

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

CURRENT APPLICATION NUMBER: US/09/769,863

FILE REFERENCE: 6763 US 01

NUMBER OF SEQ ID NOS: 32

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 22

LENGTH: 957

TYPE: DNA

ORGANISM: *Moeletrella alpina*

US-09-769-863-22

Query Match 11.4%; Score 100; DB 4; Length 957;
Best Local Similarity 60.8%; Pred. No. 4.9e-21;
Matches 163; Conservative 0; Mismatches 105; Indels 0; Gaps 0;

QY 325 GATGTCGGGTAGCCAGAGTCTTGTGTGATCTTCTTCCAACTAGTGAAGTTCTGT 384
DB 439 GGTCTTCTTATGAGCAAGATGATCTGCTCTCTTCTTCTTCCAACTAGTGAAGTTCTGT 498
QY 385 GACACATTTCTTTGTTCTAGAAAAAGCAATGATGATCACTTCTTCTTCTTCTTCT 444
DB 499 GACACATATATATGCTCTCAAGAAAGCAAGCCGAGATCTCTTCTTCTTCTTCTTAC 558
QY 445 CACACAGCTTCATGTTCAACATCTGATGATGATGATGATGATGATGATGATGATGAT 504
DB 559 CACACAGCTTCATGTTCAACATCTGATGATGATGATGATGATGATGATGATGATGAT 618

QY 505 AGCTTCTTGGACCCACCTGAGACAGCTTTATCCACATCTCTCANGTACTCTCTACTAGGC 564
 Db 619 GCTTACTTCTCTGCTGCGGTGAGACTCGTTTCATCCATGATCATGTAGGCTACTACTTC 678
 QY 565 CTGTCTGTGTCTCCGTCATGCAAGT 592
 Db 679 TTGTGGCCTTGCGCTTCAGCAGGTGT 706

Search completed: April 1, 2004, 08:25:28
 Job time : 80.5616 secs